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The Big Banks: Background, Deregulation, Financial Innovation and Too Big to Fail

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The Big Banks: Background, Deregulation, Financial Innovation

and Too Big to Fail

The U.S. economy is still reeling from the financial crisis that exploded in the fall of 2008. This article asserts that the big banks were major culprits in causing the crisis, by funding the non-bank lenders that created the toxic mortgages which the big banks securitized and sold to unwary investors. Paradoxically, banks which were then too big to fail are even larger today.

The article briefly reviews the history of banking from the Founding Fathers to the deregulatory mindset that has been present since 1980. It then traces the impact of deregulation which led to the savings and loan crisis of the 1980s and the current financial crisis. Prior to deregulation, we had gone fifty years without a financial crisis. The article briefly examines the causes of the crisis and analyzes in depth the financial innovation that former Chairman Greenspan extolled but that led us into a near financial meltdown. It traces the growth of the big banks and asserts that breaking them up would improve efficiency, permit risk to be priced appropriately, increase competition and eliminate many conflicts of interest, including those of management who pursue greater financial rewards by ignoring the potential for catastrophic risk. It also asserts that regulation cannot be left in the hands of regulators who do not believe in regulation.

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The Big Banks: Background, Deregulation, Financial Innovation and Too Big to Fail

"If they're too big to fail, they're too big."[1]

I. Introduction

When former Federal Reserve chairman Alan Greenspan offered the above comment, some listeners were shocked. However, if former chairman Greenspan were viewed as a true conservative, such an approach should not be shocking since, until the Reagan administration in 1980, conservatives generally were strong advocates of an antitrust enforcement and viewed excessive size and power with suspicion.[2] However, until he recently "got religion,"[3] Greenspan was more a libertarian than a conservative, and it was his libertarian instincts that were part of the cause of the financial crisis that unfolded in 2007 and 2008, but began much earlier, and continues through today. Besides the lack of regulation embodied in Greenspan's philosophy, another major cause of the crisis was the greed and incompetence of the big banks that financed the non-bank mortgage companies which generated many of the toxic loans, loans which were then securitized into toxic securities by the big banks and sold to unwary investors.

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[1] Alan Greenspan, *C. Peter McColough Series on International Economics: The Global Financial Crisis: Causes and Consequences*, COUNCIL ON FOREIGN RELATIONS, OCT. 15 2009, *available at* http://www.cfr.org/publication/20417/c_peter_mccolough_series_on_international_economics.html.

[2] *See Republican Party Platform of 1972*, The American Presidency Project (Aug. 21, 1972) *available at* ,http://www.presidency.ucsb.edu/ws/index.php?pid=25842#axzz1W4javJKZ:

> We will press on for greater competition in our economy. The energetic antitrust program of the past four years demonstrates our commitment to free competition as our basic policy. The Antitrust Division has moved decisively to invalidate those "conglomerate" mergers which stifle competition and discourage economic concentration. The 87 antitrust cases filed in fiscal year 1972 broke the previous one-year record of more than a decade ago, during another Republican Administration. ***
> Small business, so vital to our economic system, is free enterprise in its purest sense. It holds forth opportunity to the individual, regardless of race or color, to fulfill the American dream. The seedbed of innovation and invention, it is the starting point of many of the country's large businesses, and today its roll [sic] in our increasingly technological economy is crucial. We pledge to sustain and expand that role.

[3] *See* Alan Greenspan, *New York Economic Club Speech*, Feb. 17, 2009, at 3, *available at* http://online.wsj.com/public/resources/documents/EconClub.PDF:

> But in August 2007, the risk management structure cracked. All of the sophisticated mathematics and computer wizardry essentially rested on one central premise: that enlightened self interest of owners and managers of financial institutions would lead them to maintain a sufficient buffer against insolvency by actively monitoring and managing their firms' capital and risk positions. When in the summer of 2007 that premise failed, I was deeply dismayed.
>
> I still believe that self regulation is an essential tool for market effectiveness—a first line of defense. But, it is clear that the levels of complexity to which market practitioners, at the height of their euphoria, carried risk-management techniques and risk-product design were too much for even the most sophisticated market players to handle properly and prudently. Accordingly, I see no alternative to a set of heightened federal regulatory rules for banks and other financial institutions.

When President Obama took office, monthly job losses exceeded over 700,000 jobs, and a worldwide economic collapse had been averted only by the prior action of the Bush administration in arranging a $700 billion bailout of financial and other systemically important institutions.[4] But the $700 billion was only the tip of the iceberg in terms of the financial assistance provided to the big banks. Bloomberg reported that the federal government pledged over $12.8 trillion to avoid a financial meltdown.[5] President Obama then undertook an inadequate stimulus package in an attempt to restart the rest of the economy, but thereafter turned his focus to health care. A macro approach to the causes of the financial crisis was not undertaken until comprehensive legislation, namely, the Dodd –Frank Wall Street Reform and Consumer Protection Act, was finally enacted in July of 2010.[6] While this legislation probably would have precluded the current financial crisis by requiring originators to implement mortgage underwriting standards, by requiring securitizers to have some skin in the game, and by exposing credit rating agencies to liability, it may not prevent future crises because it did not adequately address the power of the big banks and their culture of risk taking.[7]

Part II is a short history of the attitude toward large banks and their power in this country, from the time of our Founding Fathers to the present. It first looks at the period up to the Great Depression, during which, for the most part, banking power was viewed with suspicion. It then examines the impact of the turmoil of the 1970s, particularly inflation, upon banking and then focuses on deregulation, basically begun under President Reagan in 1980 and following years. Part III examines many of the causes of the financial crisis, and also the aftermath of the crisis, which has devastated our economy. Part IV examines financial innovation, which was extolled by Chairman Greenspan, but which in large part led to the current financial crisis. Part V examines the growth of the big banks, which consequently became "too big to fail," the impact of too big to fail on competition and the creation of financial innovations, proposals to limit their size, and the benefits of breaking up the big banks, including less complexity, better monitoring by the markets and creditors, and reduced conflicts of interest. The article concludes that it was the failure of the banking system, not business cyclicality, that led to our depressed economy and that the approach in Dodd-Frank does not adequately deal with the problem of too big to fail. The mega banks need to be down-sized, voluntarily or by legislation, to create entities that are

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[4] Emergency Economic Stabilization Act of 2008, Pub. L. No. 110-343, 122 Stat. 3765 (2008), *available at* http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_public_laws&docid=f:publ343.110. Passed by the Senate on October 1, 2008, the House on October 3, 2008, and signed into law by President Bush on October 3, 2008. *Id.*

[5] Mark Pittman & Bob Ivry, *Financial Rescue Nears GDP as Pledges Top 12.8 Trillion,* BLOOMBERG NEWS, Mar. 31, 2009, *available at* http://www.bloomberg.com/apps/news?pid=newsarchive&sid=armOzfkwtCA4.

[6] On July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203 (2010). [hereinafter sometimes referred to as the "Dodd-Frank," or simply the "Act,"], was signed into law by President Obama. *Available at* http://www.gpo.gov/fdsys/pkg/BILLS-111hr4173enr/pdf/BILLS-111hr4173enr.pdf

[7] *See generally,* Charles W Murdock, *The Dodd-Frank Wall Street Reform and Consumer Protection Act: What Caused the Financial Crisis and Will Dodd-Frank Succeed in Preventing Future Crises?* 64 S.M.U.L.REV. 1243(2011).

manageable, transparent and able to assess risk properly. Moreover, we need to change the mentality that the government is the problem, not the solution.

II. Short History of Banking : How We Got to Too Big to Fail

A. Founding Fathers to 1980

Going back to our Founding Fathers, there has been concern about the nature of our banking system and the potential for abuse arising from the power of banks. Alexander Hamilton favored a publicly chartered bank similar to the Bank of England, and legislation to create such a bank was passed by Congress in 1791.[8] However, Thomas Jefferson was deeply suspicious of banks and lobbied President Washington to veto the legislation.[9] A brief by Hamilton convinced Washington to sign the legislation.[10] Later, however, the charter of the First Bank was allowed to expire.

After the War of 1812, it became clear that a national bank was needed, particularly to provide funding for war. Legislation creating the Second Bank of the United States, again with a 20-year charter, was adopted in 1816 and signed into law by President Madison.[11] Nicholas Biddle was in charge of the bank and alienated Andrew Jackson, who was elected president in 1828, because he used the bank's economic power to curry favor with members of Congress. Jackson was a believer in a strong presidency and thought that the Second Bank's monopoly over government finances gave Biddle and his friends undue profits and power. Jackson is reported to have said "the bank is trying to kill me, but I will kill it!"[12] He vetoed the recharter bill on the basis that the Bank enjoyed undue economic privilege.[13]

Jackson's opponent in the 1832 election was Henry Clay, who was aligned with Biddle and sought to renew the Second Bank's charter four years early to make it an issue in the presidential campaign. Jackson again won the presidency, and thus, his prior veto was not overturned. Biddle sought to retaliate. According to one commentator, Biddle's actions demonstrated that Jackson's fear of the power of the Second Bank was well-founded:

> When Jackson began transferring the federal government's deposits out of the Second Bank to his favored "pet banks," the Second Bank demanded payment of bills issued by state banks and reduced loans by over $5 million, contracting the money supply and causing interest rates to double to 12 percent. Biddle hoped, by damaging the economy,

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[8] See *Hamilton vs. Jefferson*, COUNTRY STUDIES *available at* http://countrystudies.us/united-states/history-41.htm.
[9] JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES, *Volume I: From Christopher Columbus to the Robber Barons (1492-1900)* 89-90 (M.E. Sharpe, Inc. 2002).
[10] *See* GEORGE ROGERS TAYLOR, HAMILTON AND THE NATIONAL DEBT 71-78 (D.C. Heath and Company 1950).
[11] RICHARD H. TIMBERLAKE, MONETARY POLICY IN THE UNITED STATES: AN INTELLECTUAL AND INSTITUTIONAL HISTORY 28-42 (The University of Chicago Press 1993).
[12] The White House.Gov - Our Presidents - 7. Andrew Jackson, *available at* http://www.whitehouse.gov/about/presidents/andrewjackson.
[13] *Id.*

to stir up opposition to Jackson; in the process, he showed that Jackson had not been wrong to fear the power of a major bank to distort the economy for its own purposes.[14]

Even though there was no central bank, the state banking system rapidly expanded, and industry experienced incredible growth through the balance of the 19th century, notwithstanding the disruption of the Civil War. Some would say that industry grew too big, since the last couple of decades of the 19th century were the "Gilded Age," or the age of trusts;[15] this in turn led to the enactment of the Sherman Act in 1890,[16] and subsequent "trust-busting" by President Theodore Roosevelt.[17]

The rise of the trusts was funded by the investment bankers, the most powerful of whom was J.P. Morgan. His arrogance and power was reflected in his alleged statements to President Roosevelt: "[I]f we have done anything wrong, send your man to see my man, and they can fix it up."[18]

Roosevelt's trust busting was interrupted by the Panic of 1907, which was triggered by an attempt to manipulate the price of United Copper Company by insiders and their bankers.[19] When the attempt failed, it triggered a run on the banks involved in the scheme and then spread to other banks. To satisfy their customers demand for deposits, the banks were forced to sell assets, thus pushing down their prices and exacerbating the situation in a manner similar to what we have experienced in this current crisis. Since there was no central bank available to step in and provide credit to the banks, J.P. Morgan tried to stem the tide by providing credit but, since he could not muster enough funds to save all the banks, in effect, he decided which banks would survive and which would not. However, even this did not stem the tide, and the federal government provided $25 million to New York banks to provide the necessary liquidity.[20]

The Panic brought both bankers and industry to the realization that there was a need for a central bank. Understandably, what the bankers wanted from a central bank was an entity that could bail out banks when they were in trouble; they certainly did not want more regulation. However, the Pujo committee concluded that control of credit was in the hands of a small number of Wall Street bankers who had considerable economic power.[21] Louis Brandeis, who was an adviser to President Woodrow Wilson, was also leery of the power of big banks and

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[14] SIMON JOHNSON & JAMES KWAK, 13 BANKERS: WALL STREET TAKEOVER AND THE NEXT FINANCIAL MELTDOWN 20 (2010).

[15] *See* A CLASSIFICATION OF AMERICAN WEALTH – PART II: AMERICA IN THE GILDED AGE, *available at* http://www.raken.com/american_wealth/trusts/the_trusts1.asp.

[16] JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES, VOL. I 363 (2002).

[17] JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES, VOL. II 27 (2002).

[18] EDMUND MORRIS, THEODORE REX 91 (2001).

[19] JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES, VOL. II 27-31 (2002).

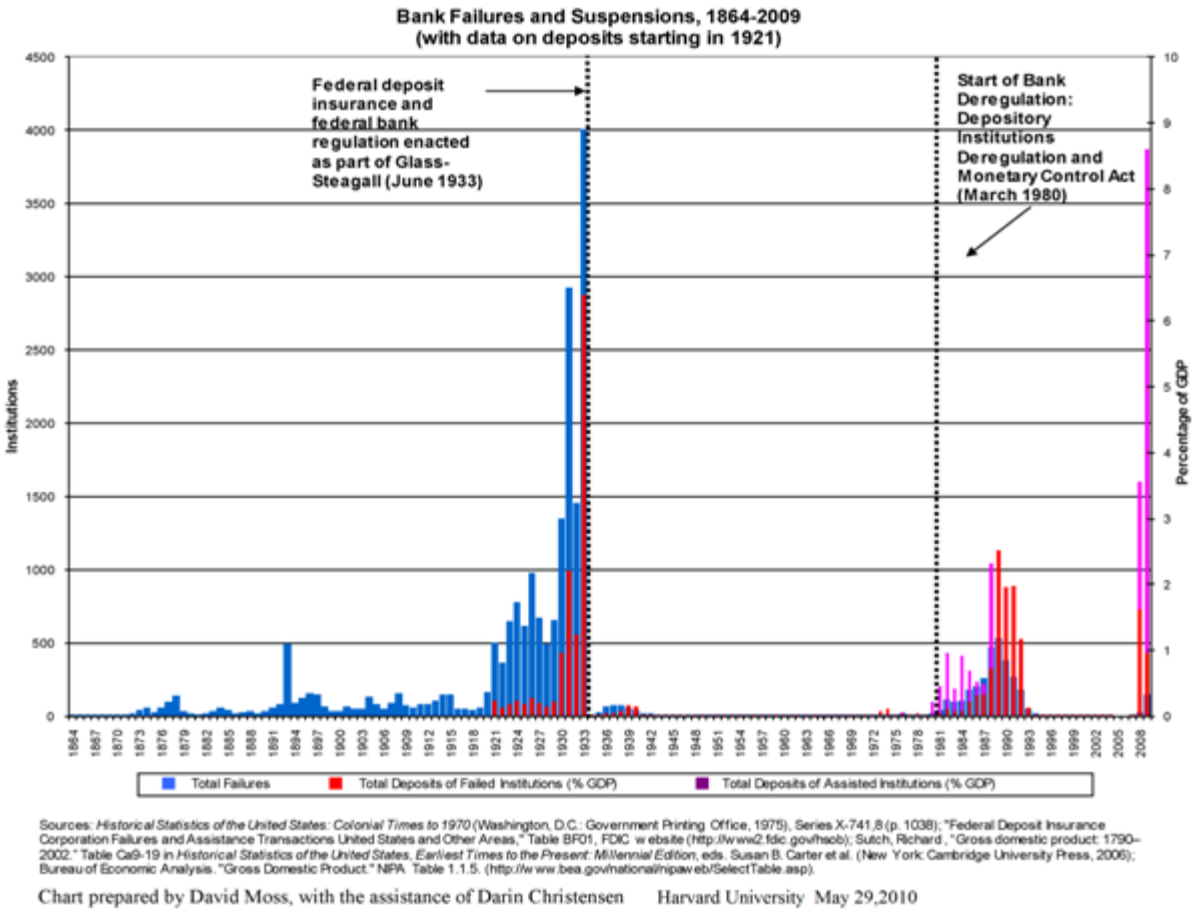
[20] RON CHERNOW, THE HOUSE OF MORGAN: AN AMERICAN BANKING DYNASTY AND THE RISE OF MODERN FINANCE 123-24 (1990).

[21] JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES, VOL. II 48 (2002); LOUIS D. BRANDEIS, OTHER PEOPLE'S MONEY AND HOW THE BANKERS USE IT 49 (Melvin I. Urofsky, ed., Bedford Books of St. Martin's Press 1995).

favored stronger regulation.[22] Unfortunately, the compromise bill that was passed in 1913[23] gave the banks access to public funds when needed but was not overly strong on regulation side. While the first president of the Federal Reserve Board New York, Benjamin Strong, was allied with J.P. Morgan,[24] he is generally regarded as having been a good chairman, even though he did not stem the credit that was leading to the Great Depression.

Because of the implicit government guarantee and weak regulation, banks were able to provide cheap money for the speculation that led to the market crash of 1929. President Franklin Roosevelt, Teddy Roosevelt's cousin, was elected president in 1932 and quickly passed the Glass-Steagall Act in 1933.[25] One of the major provisions of this act was to separate investment banking and commercial banking. Commercial banks were protected against depositor runs by the FDIC but, in return, were subjected to strict federal regulation. This regulatory regime provided approximately 50 years without a serious financial crisis. See chart below[26]:

[22] *See* LOUIS D. BRANDEIS, OTHER PEOPLE'S MONEY AND HOW THE BANKERS USE IT (Melvin I. Urofsky, ed., Bedford Books of St. Martin's Press 1995).
[23] Federal Reserve Act of 1913, Pub. L. No. 63-43, 38 Stat. 251 (codified at 12 U.S.C.A Ch. 3).
[24] Russ Roberts & Barry Eichengreen, *Eichengreen on the Dollar and International Finance*, ECONTALK (June 6, 2011), at 33:02, http://www.econtalk.org/archives/2011/06/eichengreen_on.html.
[25] Glass-Steagall Act, Pub. L. No. 73-66, 48 Stat. 162 (1933).
[26] David Moss, *Bank Failures and Suspensions in the United States, 1864-2008: Three Charts*, HARV. BUS. SCH. (Dec. 14, 2009), *available at* http://fcic-static.law.stanford.edu/cdn_media/fcic-testimony/2009-1116-Moss-charts.pdf.



While the banking system was not perfect and there were flaws that needed to be corrected, the mindset on regulation dramatically changed in 1980 when President Reagan uttered his often repeated phrase "government is not the solution; government is the problem."[27]

B. 1980 - 2007: Deregulation and the Dominance of Finance

1. <u>Prelude: Changing times in the 1970s</u>.

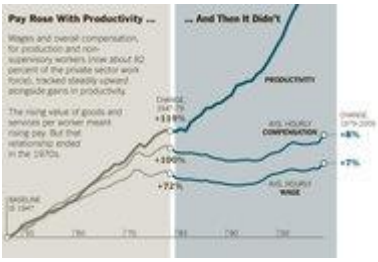
The 1930s were the era of depression; the early 1940's the era of war; and from then to the 1970s, the era of prosperity and the growth of the middle class.[28] This prosperity was driven by

[27] President Ronald Reagan, First Inaugural Address (Jan. 20, 1981).
[28] Robert B. Reich, *The Limping Middle-Class, New York Times*, Sept. 3, 2011, *available at* http://www.nytimes.com/2011/09/04/opinion/sunday/jobs-will-follow-a-strengthening-of-the-middle-class.html?_r=1 Professor Reich used the following chart to illustrate the differences between the "Great Prosperity" (1947-1977) and the age of deregulation:

education and technological, not financial, innovation. Banking was boring, giving rise to the 3-6-3 analogy: borrow at 3%, lend at 6%, and hit the golf course by 3 o'clock. Both commercial and investment banking were effective in funneling capital to industry. Moreover, governmental programs, which were also responsible for the growth in higher education,[29] made home ownership a reality for most Americans.[30]

At this time, investment banks were partnerships.[31] Since investment bankers were personally liable, they had their own wealth at risk, not just other people's. This created a more conservative mindset. Bankers' compensation was comparable to that of private sector jobs.[32]

While this was an era of unmatched general prosperity, this is not to say that all was well. Not only were there the Korean and Vietnam wars, but also the "Cold War," or nuclear detente with Russia with the fear of a nuclear holocaust. Nevertheless, median income was growing,[33] unions were powerful, and the top CEO pay was only about 25 times that of the average worker.[34] Parenthetically, in the 2000s, studies showed that CEOs made from 262 to 531 times as much as the average worker.[35] Government funded innovation, which was transferred to industry, and industry in turn invested in domestic jobs.[36]



Id.

[29] *See, e.g.* 38 U.S.C. § 3001 – 4335 (2006) (providing education benefits to veterans), Post-9/11 GI Bill, 38 C.F.R. §21.1029 – 21.9770 (2009) (providing education benefits to veterans and their dependents), Economic Opportunity Act of 1964, Pub. L. No. 88-452, 78 Stat. 508 (repealed 1981), 20 U.S.C. § 1070A (2011) (providing Federal Pell Grants to students of institutions of higher education).

[30] National Housing Act of 1934, Pub. L. No. 73-479, 48 Stat. 1246 (codified as amended 12 U.S.C. §§ 1701-1750 (2000)).

[31] *See* Claire Hill and Richard Painter, *Berle's Vision Beyond Shareholder Interests: Why Investment Bankers Should Have (Some) Personal Liability*, 33 SEATTLE U. L. REV. 1173, 1177-78 (2010) ("Until the 1980s, most investment banks were general partnerships run by partners who were personally liable for the debts of their firms. A partner of Lehman Brothers did not want or need the government to tell him how to run his business; if the business failed, the partner paid.").

[32] Johnson & Kwak, 13 BANKERS, *supra* note 15, at 115 fig. 4.

[33] *See* Reich, *supra* note 29.

[34] Lawrence Mishel, *CEO-to-worker pay imbalance grows*, ECONOMIC POLICY INSTITUTE, THE STATE OF WORKING AMERICA, Fig. A *Ratio of CEO to average worker pay, 1965-2005* (June 26, 2006), http://www.epi.org/publication/webfeatures_snapshots_20060621/ In 2000, CEO pay was about 531 times the size of average worker pay. *Id.* The following article may give a more historical perspective: Eric Wahlgren, *Spreading the Yankee Way of Pay*, BUS. WK. (Apr. 18, 2001), http://www.businessweek.com/careers/content/apr2001/ca20010419_812.htm.

[35] *Id.*

[36] *See generally*, CLYDE PRESTOWITZ, THE BETRAYAL OF AMERICAN PROSPERITY (2010).

Then came the uncertainty of the 1970s. Upon being elected in 1968, President Nixon was confronted with a recession[37] and scandals in the securities markets[38] that, in part, led to a two-tiered stock market.[39] Large-cap stocks did well, but small cap stocks were pummeled, leading to the going private phenomenon of the mid-70s.[40] Nixon experimented with price controls, and, when he took the lid off, prices soared[41]—also sparked by the OPEC oil embargo.[42]

At this time, the SEC moved to modernize the securities industry. Institutions, such as pension funds and mutual funds, which had grown as a result of our overall prosperity, chafed at the fixed commission structure of the New York Stock Exchange.[43] If you traded 100,000 shares, you paid about 1000 times as much as if you traded 100 shares. While this was arguably inefficient, it had one salutary effect: institutions were investors, rather than traders. And commercial banks could not trade because of Glass-Steagall. Twenty million shares were a good trading day on the New York Stock Exchange.[44] This all changed with the elimination of fixed commissions by the Securities Act Amendments of 1975.[45] This year, the average trading volume has been about 1 1/2 billion shares a day and on October 10, 2008, reached over seven billion shares.[46]

Also, at this time, Republicans were the party of small business: this meant they believed in effective anti-trust enforcement.[47] The 1964 Securities Reform Act introduced a regime of

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[37] *See* Interview by PBS Commanding Heights with Paul Volcker, (Sept. 26, 2000) *available at* http://www.pbs.org/wgbh/commandingheights/shared/minitextlo/int_paulvolcker.html [hereinafter Volcker Interview] (chronicling Volker's views on the recession that greeted President Nixon when he took office, the surprising inflation that followed, and the imposition of wage and price controls, as well as the "stagnation" which confronted President Carter: inflation coupled with a stagnant economy).

[38] *See, e.g.* Sec. & Exch. Comm'n v. Texas Gulf Sulphur Co., 446 F.2d 1301 (1971) (defendant officers of Texas Gulf, after learning of a significant find, misrepresented the results of testing at the site while making large purchases of company stock).

[39] Lewis D. Solomon, *Institutional Investors: Stock Market Impact and Corporate Control*, 42 GEO. WASH. L. REV. 761, 762 (1973) (describing the two-tiered market as one "in which institutional security favorites enjoy ever mounting prices, while other companies languish at low price-earnings multiples").

[40] A.A. Sommer, Jr., Commissioner, Sec. & Exch. Comm'n, "Going Private": A Lesson in Corporate Responsibility (Nov. 14, 1974) *available at* http://www.sec.gov/news/speech/1974/111474sommer.pdf.

[41] Volcker Interview, *supra* note 38.

[42] *Arabs Threaten Oil Embargo in Week if Demand Isn't Met*, L.A. Times, Feb. 8, 1971, at D10.

[43] *See In the Midst of Revolution: the SEC, 1973-1981*, SEC HISTORICAL SOCIETY, http://www.sechistorical.org/museum/galleries/rev/rev02c.php.

[44] *See* NEW YORK STOCK EXCHANGE, FINANCIALS: NEW YORK STOCK EXCHANGE TRANSACTIONS AND STATISTICS-NYSE STATISTICS ARCHIVE 1970-1979, *available at* http://www.nyse.com/marketinfo/stats/vol70-79.dat.

[45] *See* Pub. L. 94-29 (in part codifying SEC Exchange Act Rule 19b-3, eliminating fixed commissions).

[46] *See* NEW YORK STOCK EXCHANGE, FINANCIALS: NEW YORK STOCK EXCHANGE TRANSACTIONS AND STATISTICS, *available at* http://www.nyse.com/financials/1143717022567.html & http://www.nyse.com/financials/1108407157455.html (last visited, September 8, 2011). On one recent day, 236,314,500 shares of just one stock, Bank of America, were traded. *See Most active New York Stock Exchange-traded stocks*, BLOOMBERG BUS.WK., Sept., 8, 2011, *available at* http://www.businessweek.com/ap/financialnews/D9PG02Q81.htm.*See also* NEW YORK STOCK EXCHANGE GROUP VOLUME RECORDS – TOP 10 DAYS, *available at* http://www.nyxdata.com/nysedata/asp/factbook/viewer_edition.asp?mode=table&key=3007&category=3.

[47] *See* Republican Party Platform of 1972, *supra* note 2,.

public disclosure to the over-the-counter market.[48] Prior to this development, if you wanted to do due diligence in an acquisition, you needed to bargain for it in a negotiated transaction. But with public disclosure of financial and business information in the OTC market, hostile takeovers, sometimes referred to as overhead tender offers, became a prudent opportunity.[49] While acquisitions increased, merger mania had not yet begun. Antitrust was still something to be reckoned with.

2. 1980 - 2000: Deregulation: the Savings & Loan Crisis, Greenspanomics, and Squelching Derivative Regulation.

Economic stagnation, unheard of interest rates, and inflation characterized the 1970s. Apparently, the Iranian hostage crises was the last straw, and President Ronald Reagan turned President Carter into a one-term president in the 1980 election. Reagan's goal was to restore prosperity by getting government off peoples' backs.[50] A major tool was deregulation.[51]

Inflation was problematic for savings and loan institutions. In effect, they had their assets long and liabilities short: as a caricature, on the asset side, the savings and loan association had a 30 year mortgage yielding 6% but, by 1980, on the liability side, some certificates of deposit were commanding 12% or more.[52] While, in It's A Wonderful Life, Jimmy Stewart was able to explain where the depositor's money had gone, investors were not appeased by the fact that their mortgage was at 6%; they wanted a market rate of return on their certificates of deposit.

Deregulation actually began under President Carter. At the end of his term, the "Depository Institutions Deregulation and Monetary Control Act of 1980" was passed.[53] The Regulation Q limit on the interest that could be paid on traditional savings accounts was phased out and banks could now compete with money market funds[54] government bonds,[55] and other

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[48] Pub. L. 88-467.

[49] When one company seeks to acquire another, it wants to ensure that it knows what it is buying. Prior to the 1964 amendments to the Securities Exchange Act, companies generally engaged in negotiated transactions in which an agreement was executed which, prior to closing, enabled the acquirer to do due diligence. In addition, extensive representations and warranties were included in the acquisition agreement, the breach of which would either excuse closing or provide a cause of action. After the amendments created some 10,000 over-the-counter companies which were required to file annual, quarterly, and current reports, an acquirer, who was thwarted by management of a target corporation which would not enter into a negotiated transaction, could make an "overhead tender offer" directly to the shareholders. Now, in such a situation, the acquiring company would not be flying blind because of the public availability of information.

[50] *See* Reagan, *supra* note 28.

[51] President Reagan, Remarks on Signing the Garn-St. Germain Depository (Oct. 15, 1982), *available at* http://www.reagan.utexas.edu/archives/speeches/1982/101582b.htm.

[52] *See, e.g.*, Eric N. Berg, *Bowery Savings Bank Is Sold for $200 Million*, N. Y TIMES, Oct. 6, 1987, at A1, D6, *available at* http://www.nytimes.com/1987/10/06/business/bowery-savings-bank-is-sold-for-200-million.html ("Beginning in the early 1980's, in a story replayed at thrift institutions nationwide, the Bowery fell onto hard times as interest earnings from its portfolio of old, low-paying, fixed-rate mortgages were inadequate to finance high-rate deposits.").

[53] Pub. L. 96-221. Title II

[54] *See* US Securities and Exchange Commission, *Money Market Funds, available at* http://www.sec.gov/answers/mfmmkt.htm.

[55] In the 1980s, I was retained as an expert by the attorney for an elderly and poorly educated widow who had $100,000 from her husband's estate to invest. Her broker put her in a variety of risky securities. The expert for the

investment vehicles. The Act also expanded the permissible range of investments by savings and loan associations,[56] and preempted state usury laws.[57]

Under President Reagan, the Controller of Currency in 1983 authorized national banks to offer adjustable rate mortgages,[58] and Congress passed the Garn-St. Germain Depository Institutions Act of 1982, which further enabled savings and loan institutions to expand their lending activities into commercial lending and even junk bonds.[59] The Act also authorized state-chartered banks to issue adjustable rate mortgages,[60] putting them on a parity with national banks, and gave the Controller of Currency the authority to lift restrictions on loan-to-value ratios, maturities, and amortization schedules, an authority the Controller exercised the following year.[61] While President Reagan hailed deregulation,[62] it lead to the collapse of thousands of savings and loans and a federal bailout of about $160 billion,[63] as well as the Keating Five scandal, in which Keating, the CEO of Lincoln Savings & Loan Association, went to jail, but the highly publicized charges against Senator McCain were dropped.[64] The impact of deregulation on the savings and loan industry was summarized in HISTORY OF THE EIGHTIES - LESSONS FOR THE FUTURE:

> Most political, legislative, and regulatory decisions in the early 1980s were imbued with a spirit of deregulation. The prevailing view was that S&Ls should be granted regulatory forbearance until interest rates returned to normal levels, when thrifts would be able to restructure their portfolios with new asset powers. To forestall actual insolvency, therefore, the FHLBB lowered net worth requirements for federally insured savings and loan associations from 5 percent of insured accounts to 4 percent in November 1980 and to 3 percent in January 1982. At the same time, the existing 20-year phase-in rule for meeting the net worth requirement, and the 5-year-averaging rule for computing the deposit base, were retained. The phase-in rule meant that S&Ls less than 20 years old had capital requirements even lower than 3 percent. This made chartering de novo federal stock institutions very attractive because the required $2.0 million initial capital investment could be leveraged into $1.3 billion in assets by the end of the first year in operation. The 5-year-averaging rule, too, encouraged rapid deposit growth at S&Ls, because the net worth requirement was based not on the institution's existing deposits but on the average of the previous five years.[65]

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broker opined that this was necessary to buy risky securities to meet her statement that she needed $12,000 a year to live on. In my testimony I pointed out that U.S. Treasury bonds were paying 12% in 1980, when the broker invested her savings. The broker settled and gave her money back.

[56] Depository Institutions Regulations and Monetary Control Act, Pub. L. No. 96-221, Title IV, 94 Stat. 132 (1980).

[57] Depository Institutions Deregulation and Monetary Control Act, Pub. L. No. 96-221, Title V, 94 Stat. 132 (1980).

[58] *See* 46 F.R. 18932-01.

[59] Pub. L. 97-320.

[60] Pub. L. 97-320, Title VIII.

[61] *See* 48 F.R. 40698-1.

[62] *See* President Reagan, *supra* note 52.

[63] *See* FEDERAL DEPOSIT INSURANCE CORPORATION, HISTORY OF THE EIGHTIES-LESSONS FOR THE FUTURE, at 169, *available at* http://www.fdic.gov/bank/historical/history/167_188.pdf.

[64] *See* Times Topics, *Keating Five*, N.Y.TIMES, *Sept. 6, 2011, available at* http://topics.nytimes.com/topics/reference/timestopics/subjects/k/keating_five/index.html. *See also* Tom Fitzpatrick, *McCain: The Most Reprehensible of the Keating Five*, Phoenix New Times, Nov. 29, 1989 *available at* http://www.phoenixnewtimes.com/1989-11-29/news/mccain-the-most-reprehensible-of-the-keating-five/

[65] FEDERAL DEPOSIT INSURANCE CORPORATION *supra* note 64, at 173.

One way to alleviate the banking conundrum of having assets long and liabilities short would be to enable banks to get the long assets, such as 30-year mortgages, off their books by selling them, thus converting them to cash, and enabling further lending. But, if the mortgage can be sold without recourse, there is the problem of moral hazard since the lender, not having the risk of loss, could be indifferent to the credit-worthiness of the borrower. This is what happened in the 2000s.

It was Ginnie Mae, a federal agency,[66] that first securitized mortgages. It would buy mortgages, combine them in pools, and then sell securities backed by the pools. These were pristine mortgage backed securities in that the securities that were issued each had an undivided interest in the pool of mortgages. Tranching the pools and creating priorities of payment was yet to come.[67]

The investment banks wanted to get into the securitization game, but were stymied by state regulations and concerns about the taxation of these securitized instruments. However, the Secondary Mortgage Market Enhancement Act of 1984[68] and the Tax Reform Act of 1986[69] eliminated these concerns.

This period of time also reflected a blurring of the lines between investment banking and commercial banking. Commercial banks sought to underwrite securities and investment banks sought to emulate savings and checking accounts. The investment banks accomplished the latter by creating cash management accounts which provided customers with check writing privileges against their accounts with the investment bank, thus competing directly with the savings and commercial banks. Investment banks also competed indirectly with savings and loan associations and commercial banks by funding the non-bank or mortgage bankers who were able to provide mortgages without the need for deposits from savers to provide the funds. On the other hand, commercial banks, as a first step, sold commercial paper for their corporate clients. After litigation[70] ultimately upheld this practice, the Federal Reserve, in a series of ratings, undercut the Glass-Steagall prohibition on underwriting by commercial banks.[71]

Under Alan Greenspan, the Fed eschewed regulation, and when it expanded the percentage of revenue that banks could earn from the securities operation of their subsidiaries from 10% to 25%, the demise of Glass-Steagall was well underway. Ultimately, President Clinton signed the Gramm-Leach-Bliley Act in 1999 which enabled financial holding companies

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[66] JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES, VOL. II 200 (2002).
[67] *See infra* text at notes 135-136.
[68] Pub. L. 98-440, 98 Stat. 1689 (1984).
[69] 100 Stat. 2085, *adding* I.R.C .§§ 860A-860G.
[70] *See e.g.,* Sec. Indus. Ass'n v. Bd. of Governors of the Fed. Reserve Sys., 468 U.S. 137 (1984); Sec. Indus. Ass'n v. Bd. of Governors of the Fed. Reserve Sys., 807 F. 2d 1052 (D.C. Cir. 1986); and Simon Kwan, *Cracking the Glass-Steagall Barriers*, FEDERAL RESERVE BANK OF SAN FRANCISCO ECONOMIC LETTER 97-08 (Mar. 21, 1997), *available at* http://www.frbsf.org/econrsrch/wklyltr/el97-08.html.
[71] Charles R. Geisst, *Undue Influence: How the Wall Street Elite Put the Financial System at Risk* (Wiley 2005) at 223, 245, 249; Kwan, *supra* note 71.

to engage in financial and ancillary activities, including banking, insurance, and securities.[72] Glass-Steagall was no more.[73]

During the Clinton administration, financial deregulation became the norm, for the most part, particularly for the Fed, under Alan Greenspan. The Riegle-Neal Act of 1994 basically eliminated restrictions on interstate banking.[74] On the other hand, also in 1994, Congress passed the Home Ownership and Equity Protection Act, which amended the Truth in Lending Act to provide that credit should not be extended "without regard to the consumers' repayment ability, including the consumers' current and expected income, current obligations, and employment."[75] In other words, no predatory lending. However, in 1998, the Federal Reserve Board decided not to "conduct consumer compliance examination of, nor to investigate consumer complaints regarding, non-bank subsidiaries of bank holding companies."[76] Had the Fed enforced the provision of the Truth in Lending Act that credit not be extended to those who did not have the ability to repay, we would not have had the plethora of "liars' loans" that, in part, led to the financial crises.

The most foolhardy example of a deregulatory mindset occurred with respect to derivatives. Brooksley Born, the head of the Commodities Futures Trading Commission, foresaw the risks that these instruments posed to the economy and sought to regulate them. However, the Clinton administration, led by Robert Rubin and Larry Summers, joined with Alan Greenspan to derail her proposal. Ms. Born's proposals were not that onerous: basically she wanted more transparency and a requirement of reserves to cushion losses. However, Larry Summers, Robert Ruben's deputy at Treasury, argued that her proposals would lead to a financial crisis. As history has proved, Born was correct, and it was the deregulatory mindset of Rubin, Summers and Greenspan that led to a financial crisis.

Consider AIG. The quants who developed credit default swaps (CDOs) believed there was a 99% probability that AIG would never need to pay out on them.[77] Consequently, AIG maintained no loss reserves. Thus, when the subprime mortgage market collapsed, AIG did not have the funds to honor its credit guarantees and the federal government was stuck with a $135 billion bailout of AIG. But the people who were sold the CDSs were rewarded handsomely with millions in commissions and other compensation. Thus, profit was privatized and risk was socialized.

Greenspan, Rubin and Arthur Levitt, then Chairman of the Securities and Exchange Commission, ("SEC") prevailed upon Congress to bar Ms. Born's attempt to regulate

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[72] Gramm-Leach-Billey Act (Financial Services Modernization Act of 1999), Pub. L. No. 106-102, 113 Stat. 1338 (1999).

[73] Interestingly, the drive for the repeal of Glass-Steagall was the acquisition by Citicorp of Travelers Insurance since Glass-Steagall would have required the new Citigroup to be broken up; Paradoxically, Citigroup eventually spun off Travelers' insurance business.

[74] Riegle-Neal Interstate Banking and Branching Efficiency Act, Pub. L. No. 103-328, 108 Stat. 2338 (1994).

[75] Pub.L. 103-325 §152(d); codified at 15 U.S.C.A. §1639(h).

[76] *See* Binyamin Appelbaum, *Fed Held Back as Evidence Mounted on Subprime Loan Abuses*, WASH. POST, Sept. 27, 2009, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2009/09/26/AR2009092602706.html.

[77] Brady Dennis & Robert O'Harrow Jr., *A Crack in the System*, WASH. POST, Dec. 30, 2008, *available at* http://www.washingtonpost.com/wp.dyn/content/article/2008/12/29/AR2008122902670_pf.html.

derivatives. The following year, Senator Gramm attached a rider to an 11,000 page appropriations bill to limit CFTC authority to regulate derivatives.[78]

3. The Continuing Pattern of Deregulation into the 2000s.

In 2000, Edward Gramlich, a former Federal Reserve Board member, suggested to Chairman Greenspan that the Fed examine consumer finance lenders that were units of federally regulated bank holding companies. Greenspan opposed this action because it might undermine the availability of subprime lending.[79] This deregulatory attitude persisted during the 2000s. According to Paul Krugman, a Nobel Prize-winning economist, at a 2003 press conference, "[r]epresentatives of four of the five government agencies responsible for financial supervision used tree shears to attack a stack of paper representing bank regulations. The fifth representative, James Gilleran of the Office of Thrift Supervision, wielded a chainsaw." [80] This interesting "visual" was emblematic of the attitude of the Fed and the Bush administration toward regulation.

In 2001, the Comptroller of Currency, the FDIC, the Federal Reserve, and the Office of Thrift Supervision, issued a joint release that, among other matters, authorized the use of "credit ratings from the rating agencies to measure relative exposure to credit risk and determine the associated risk-based capital requirement."[81] For example, if a security was rated AAA, a factor of 20% would be applied to the asset securitization in determining the amount of capital the bank would need to hold. In effect, the determination of risk assessment was transferred to the credit rating agencies. The result was the financial firms had securities that were rated AAA, and against which they held minimal capital, but which turned out to be junk.[82]

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[78] *Industry Associations Oppose Senate Legislation to Prevent "Another Enron,"* U.S. PIRG (Mar. 11, 2002), http://www.uspirg.org/home/reports/report-archives/financial-privacy--security/financial-privacy--security/industry-associations-oppose-senate-legislation-to-prevent-quotanother-enronquot.

[79] Gregg Ip, *Did Greenspan Add to Subprime Woes?* WALL ST. J., June 9, 2007, *available at* http://online.wsj.com/article/SB118134111823129555.html.

[80] Paul Krugman, *Blindly into the Bubble*, ECONOMIST'S VIEW BLOG, Dec. 21, 2007, a*vailable at* http://economistsview.typepad.com/economistsview/2007/12/paul-krugman-bl.html.

[81] Treasury Department, *Risk-based Capital Guidelines; Capital Adequacy Guidelines; Capital Maintenance: Capital Treatment of Recourse, Direct Credit Substitutes and Residual Interests in Asset Securitizations,* 66 F.R. 59614, 59625 (Nov. 29, 2001), *available at* http://files.ots.treas.gov/73135.pdf.

[82] One study found that the value of AAA-rated mortgage-backed securities (as measured by the corresponding credit default swaps prices) had fallen by 70 percent between January 2007 and December 2008. *See* Marco Pagano & Paolo Volpin, *Credit Ratings Failures: Causes and Policy Options,* (Feb. 9, 2009) (working paper, prepared for the CEPR conference on "Financial Regulation and Macroeconomic Stability: Key Issues for the G20," hosted by the British Treasury and the Bank of England on 31 January 2009), *available at* http://www.italianacademy.columbia.edu/publications/working_papers/2008_2009/pagano_volpin_seminar_IA.pdf. Accordingly to another report, by August 2008, Moody's had downgraded 90% of all asset-backed CDO investments issued in 2006 and 2007, and Standard & Poor's had downgraded 84% of the CDO tranches it rated. *See Bringing Down Wall Street As Ratings Let Loose Subprime Scourge,* MARKET PIPELINE, , Sept. 25, 2008, *available at* http://marketpipeline.blogspot.com/2008/09/bringing-down-wall-street-as-ratings_25.html. Moreover, they had downgraded 85% and 76% respectively of the AAA's they had rated.

Building upon this deregulatory mindset, the SEC, in 2004, modified the net capital rules for brokers to enable five major firms to about double their leverage.[83] According to Lee Pickard, a former SEC regulator who participated in formulating the old rule:

> The SEC's basic net capital rule, one of the prominent successes in federal financial regulatory oversight, had an excellent track record in preserving the securities markets' financial integrity and protecting customer assets. There have been very few liquidations of broker-dealers and virtually no customer or interdealer losses due to broker-dealer insolvency during the past 33 years.
>
> Under an alternative approach adopted by the SEC in 2004, broker-dealers with, in practice, at least $5 billion of capital (such as Bear Stearns) were permitted to avoid the haircuts on securities positions and the limitations on indebtedness contained in the basic net capital rule. Instead, the alternative net capital program relies heavily on a risk management control system, mathematical models to price positions, value-at-risk models, and close SEC oversight.[84]

The SEC's staff was supposed to monitor the risk assessment activities of the brokers, but never did.

When a firm's leverage ratio is in the mid-thirties, a 3% drop in the value of assets could impair its capital. The relationship between the leverage ratio and drop in the value of the assets necessary to wipe out a bank's capital is illustrated by the graph below:[85]

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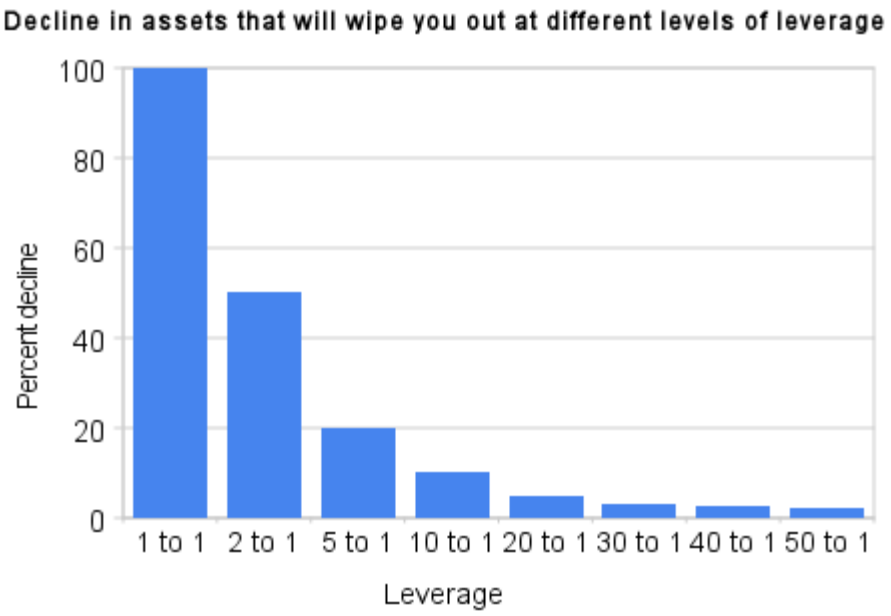
[83] *See* Julie Satow, *Ex-SEC Official Blames Agency for Blow-Up of Broker Dealers*, NEW YORK SUN, Sep. 18, 2008, *available at* http://www.nysun.com/business/ex-sec-official-blames-agency-for-blow-up/86130/. *See also* Lee A. Pickard, *SEC's Old Capital Approach Was Tried and True*, 2008 WLNR 14785498.
[84] *Id.*
[85] Ezra Klein, *Explaining Financial Regulation: Leverage and Capital Requirements*, WASH. POST, Apr. 19, 2010, *available at* http://voices.washingtonpost.com/ezra-klein/2010/04/explaining_financial_regulatio.html.



Once again, the regulators were relying upon the regulated to monitor themselves with disastrous consequences as Bear Stearns and Lehman Brothers demonstrated. Both firms had leverage ratios over 30 at the time of their collapse.

While federal regulators were oblivious to the problem of subprime lending, state regulators were more vigilant. In 1999, North Carolina passed a predatory lending law[86] and, in 2002, Georgia did the same.[87] The Office of Comptroller of Currency summarized the Georgia law as follows:

> "High-cost home loans" were subject to the restrictions on "home loans" [prohibitions on the financing of credit insurance, debt cancellation or suspension coverage, and limitations on late fees and payoff statement fees] and "covered home loans," [restrictions on the number of times a loan could be refinanced and the circumstances in which a refinancing could occur] as well as numerous disclosure requirements and restrictions on the terms of credit and loan-related fees. Creditors were required to disclose to borrowers that the loan is high-cost, and borrowers were required to be provided with certain loan counseling before the creditor could make the loan. In addition, the GFLA prohibited certain pre-payment penalties; balloon payments; negative amortization; increases in interest rates after default; advance payments from loan proceeds; fees to modify, renew, extend, amend, or defer a payment; and accelerating payments at the creditor's or servicer's sole discretion.[88]

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[86] N.C. GEN. STAT. ANN. § 24-10.2 (West 2011).
[87] GA. CODE ANN. § 7-6A-6 (West 2011).
[88] Office of Comptroller of Currency, *Preemption Determination and Order,* Aug. 5, 2003, 68 F.R. 46264, 46267, *available at* http://web2.westlaw.com/find/default.wl?rp=%2ffind%2fdefault.wl&sv=Split&utid=1&rs=WLW11.07&cite=68+fr+46264&fn=_top&mt=LawSchoolPractitioner&vr=2.0.

The practices which the states sought to outlaw, but which the Comptroller of Currency permitted, were the ones which led to the "toxic" mortgages, the collapse and foreclosures of which led to the real estate bubble bursting.

In preempting the state regulation, the Comptroller first exempted the lending of national banks from the Georgia lending restrictions; previously, the Office of Thrift Supervision had concluded that federal law preempted both the Georgia law and a New Jersey statute.[89] Later, in 2003, the Comptroller also preempted the New Jersey law and the following year generally exempted national banks from any state mortgage regulations.[90]

The attempted state regulation would have reigned in some of the predatory lending practices that led to the financial meltdown. Not only did the federal regulators shut down state regulatory enforcement, but they relaxed the supervisory power they possessed.[91] For example, consider the material loss assessment with respect to Flagship National Bank:

> OCC performed timely examinations of Flagship in accordance with examination guidelines but did not report or take actions to address the bank's CRE concentrations or its inadequate credit risk management, liberal underwriting, and poor credit administration until the 2008 examination. These conditions had existed before—from 2005 through 2007—but OCC did not address them during the earlier examinations.[92]

Everybody in the 2000s was not oblivious to the impact of deregulation and the complexity of our banking system. Alan Greenspan was honored at an annual gathering of high-powered economists in August 2005 at Jackson Hole Wyoming. Raghuram Rajan, a graduate school of business professor at University of Chicago, delivered a paper entitled *Has Financial Development Made the World Riskier?* He was concerned about the managerial incentives to take undue risk and stated that "the kinds of risks that can be concealed most easily, given the requirement of periodic reporting, are risks that generate severe adverse consequences with small probability but, in return, overgenerous compensation the rest of the time."[93] In a few short words, that describes the moral hazard among banking executives that led to the economic meltdown we experienced. He identified credit default swaps as instruments with high profitability but little *apparent* risk. This was the AIG problem. He also identified the risk posed by financial institutions that retain some of the toxic securities they produced; when the

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[89] *OTS Says New Jersey Law Does Not Apply to Federal Thrifts*, OFFICE OF THRIFT SUPERVISION (July 23, 2003, 3:00 PM), *available at* http://www.ots.treas.gov/_files/77322.html.

[90] Office of Comptroller of Currency, *Bank Activities and Operations; Real Estate Lending and Appraisals*, 69 F.R. 1904, Jan. 13, 2004, *available at* http://web2.westlaw.com/find/default.wl?rp=%2ffind%2fdefault.wl&sv=Split&utid=1&rs=WLW11.07&cite=69+fr+1904&fn=_top&mt=LawSchoolPractitioner&vr=2.0.

[91] *See* Eric Dash, *Post-Mortems Reveal Obvious Risk at Banks*, N.Y. TIMES, Nov. 19, 2009, *available at* http://www.nytimes.com/2009/11/19/business/19risk.html?pagewanted=all.

[92] *See* Department of Treasury, Office of Inspector General, *Audit Report: Material Loss Review Of Flagship National Bank*, May 3, 2011, at 5, *available at* http://www.treasury.gov/about/organizational-structure/ig/Documents/Material%20Loss%20Review%20of%20Flagship%20National%20Bank.pdf.

[93] Raghuram G. Rajan, *Has Financial Development Made the World Riskier?*, Aug. 2005, at 3, *available at* http://www.kc.frb.org/PUBLICAT/SYMPOS/2005/PDF/Rajan.paper.0907.pdf.

securities started to fail, banks would not deal with each other. Again, he was prescient: consider the discussion of Bear Stearns and Lehman Brothers in the following section.[94]

What was the reaction to his paper? He was scorned.[95] But, as the following sections demonstrate, deregulation and financial innovation brought us to the edge of economic collapse.

III. The Financial Crisis: Causes and Aftermath

I have chronicled the causes of the financial crisis in an earlier article.[96] Basically, worldwide assets available for investment doubled between 2001 and 2006.[97] However, interest rates were historically low, reflecting Chairman Greenspan's desire to keep the economy growing. The Bush tax cuts were supposed to spur the economy but growth, particularly as measured by jobs, was anemic. Because of the Fed's policies, U.S. bonds were only paying from 1% to 4 %, depending upon the date and maturity.[98] The low interest rates motivated investors to find other investments that were supposedly safe but which carried a higher return than government bonds.

Prior to 2000, real estate had been a relatively safe investment. Relying on the old data, rating agencies began to issue AAA ratings to a variety of mortgage-backed securities. Unfortunately, the mortgage market of 2003-2007 bore little relation to the pre-2000 market. The number of subprime loans jumped from 456,631 in 2000 to 2,284,420 in 2005.[99] Similarly alt-a loans increased from 78,163 in 2000 to 1,447,782 in 2005.[100] Subprime loans were among the financial innovations that Chairman Greenspan extolled. Other products, such as pic-a-pay loans, came into the market. A pic-a-pay loan permitted a borrower to choose the amount of the mortgage payment, which could be even less than the accruing interest, thereby creating a negative amortization situation. Adjustable rate mortgages supplanted the traditional 30 year fixed payment mortgage. When they reset to a higher interest rate, the buyer often could not make the higher monthly payment. And “no doc,” or "liars loans," became prevalent. Mortgage lenders stopped verifying the borrower's financial information; as one lender stated: "So I don't

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[94] *See infra* notes 105-107.
[95] Justin Lahert, *To outline his fears about the U.S. economy, Raghuram Rajan picked a tough crowd,* WALL ST. J. Jan 2, 2009, *available at* http://online.wsj.com/article/SB123086154114948151.html.
[96] *See* Murdock, *supra* note 7.
[97] *See* INTERNATIONAL FINANCIAL SERVICES LONDON OCTOBER 2008, FUND MANAGEMENT REPORT 7 (Apr. 2008), *available at* http://www.ifsl.org.uk/upload/CBS_Sovereign_Wealth_Funds_2008.pdf (last visited Oct. 6, 2009).
[98] *See* Statistical Abstract of the United States 2009, *Bond Yields: 1980 to 2007*, tbl 1158, http://www.census.gov/compendia/statab/tables/09s1158.xls.
[99] Government Accountability Office, *Characteristics and Performance of Nonprime Mortgages*, July 28, 2009, http://www.gao.gov/new.items/d09848r.pdf [hereinafterGAO Report]. The data in this section on subprime and Alt-A loans is derived from Table 2 in Enclosure I, page 24. Subprime Loans are those made to a borrower with a low credit score at an interest rate above that for traditional mortgages. Alt-A loans are those made without traditional documentation.
[100] *Id.*

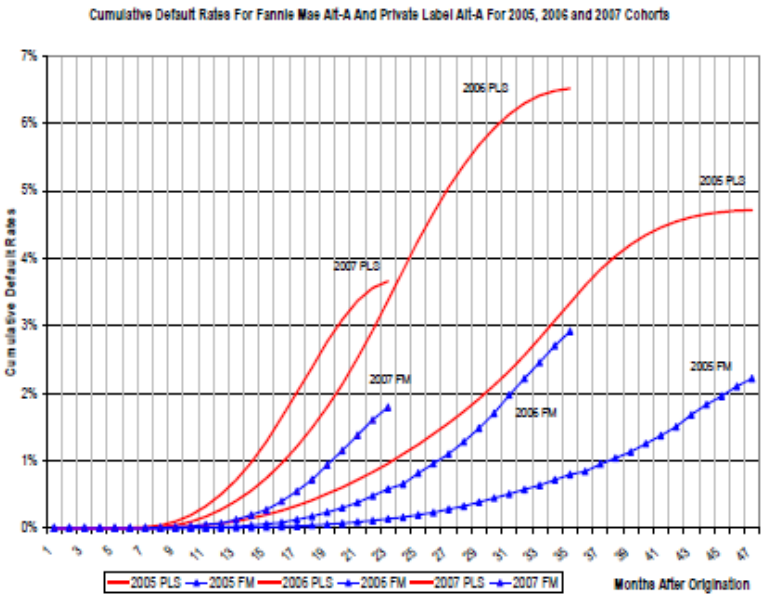
really need to know what you make. I don't need proof. You tell me you make $200,000 a year? You make $200,000 a year."[101]

Loans were churned out, not underwritten. The Financial Crisis Inquiry Commission reported:

> Several of these factories were originating, packaging, securitizing and selling at the rate of $1 billion a day. The quality control process failed at a variety of stages during the manufacturing, distribution and on-going servicing.[102]

Profits for mortgage lenders and investment bankers increased dramatically, as did CEO compensation, sales and finder commissions, and bonuses. Rating agencies sold their AAA ratings to the investment bankers, who compensated the rating agencies handsomely for their ratings. Volume, not quality, was the touchstone. Everybody was making money hand over fist. Financial professionals apparently expected the joyride to go on forever.

But then came the mortgage defaults. While some commentators have blamed Fannie Mae for the crisis, the "private label" securities produced by Wall Street defaulted at twice the rate as those of Fannie Mae. See chart below for the fourth quarter of 2008;[103] in the ensuing three years, the default rates have about tripled:[104]



[101] *See 60 Minutes, House of Cards: The Mortgage Mess,* (CBS television broadcast May 25, 2008).
[102] *See* Keith Johnson, Former President of Clayton Holdings, Inc. & Former President of Washington Mutual's Long Beach Mortgage, Testimony Before the Financial Crisis Inquiry Commission(Sept. 23, 2010), at 2, *available at* http://fcic-static.law.stanford.edu/cdn_media/fcic-testimony/2010-0923-Johnson.pdf.
[103] Fannie Mae, *2008 Credit Supplement*, Feb. 26, 2009, at 12, *available at* http://www.fanniemae.com/resources/file/ir/pdf/quarterly-annual-results/2008/2008_10K_credit_summary.pdf.
[104] Fannie Mae, *2011 First Quarter Credit Supplement*, May 6, 2011, at 13, *available at* http://www.fanniemae.com/ir/pdf/sec/2011/q1credit_summary.pdf.

As the default rates increased, down came the price of mortgage-backed securities and, first in line, down came Bear Stearns in March 2008.[105] The "bailout" of Bear Stearns seemed to settle the situation temporarily, but then came Lehman Brothers.[106] Treasury Secretary Paulson decided not to rescue Lehman Brothers; it went bankrupt, and the Primary Reserve Fund "broke the buck."[107] A worldwide economic meltdown was in the offing.[108]

Congress responded with a $700 billion bailout,[109] and the Fed made trillions of dollars of credit available to the banks.[110] While government bailed out banks, government essentially asked nothing in return. The banks rewarded the federal largess by aggressively resisting the inadequate Dodd-Frank reform legislation.[111] The specter of another Great Depression was avoided, but the economy was in shambles. The new Obama administration responded with an inadequate stimulus package,[112] which turned out to be a palliative, rather than a cure.[113]

President Obama also sought to provide some relief for beleaguered homeowners to help them avoid foreclosure.[114] This program turned out to be a failure since banks had no incentive to accept a modest fee for modifying mortgages when such modification would impact their assets and their earnings.[115] At this time, probably most banks were "legally" insolvent—assets were less than liabilities—but we will never know because an accounting change saved them

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[105] *See* WILLIAM D COHAN, HOUSE OF CARDS (2009) (chronicling in great detail the 10 days in March that led to the collapse of Bear Stearns).

[106] *Big Banks Fail, Signaling More Economic Troubles Ahead*, PBS NEWSHOUR, Sept. 16, 2008, *available at* http://www.pbs.org/newshour/extra/features/us/july-dec08/banks_9-16.html.

[107] Diana B. Henriques, *Buck Broken, but Timing May Affect Reductions*, N.Y. TIMES, Nov. 27, 2008, *available at* http://www.nytimes.com/2008/11/27/business/27fund.html ("Breaking the Buck" means that the value of a share in the mutual fund fell below one dollar. Money is invested or borrowed in a money market system on a short-term basis, sometimes overnight. While the return is not as much for a long-term investment, investors do not expect to lose any money. Money market funds are regarded as totally safe. Companies park their money in them overnight and rely upon them as a source of credit when they need short-term funds. All companies oscillate between having cash on hand and needing to borrow cash on a particular day. Thus, when the Lehman Brothers debt was written down, first to $.80 on the dollar and then to zero, it created a panic as investors rushed to get their money out of money market funds.).

[108] Treasury Secretary Paulson responded to the crisis by calling Congressional leaders together and informing them that "[u]nless you act, the financial system of this country and the world will melt down in a matter of days." *See* Michael Kirk, et al., *Inside the Meltdown*, FRONTLINE, Feb. 17, 2009 *available* at http://www.pbs.org/wgbh/pages/frontline/meltdown/etc/script.html.

[109] See Emergency Economic Stabilization Act of 2008, *supra* note 4.

[110] *See* Pittman & Ivry, *supra* note 5.

[111] *Financial Regulatory Reform*, N.Y. TIMES, JULY 19, 2011 *available at* http://topics.nytimes.com/topics/reference/timestopics/subjects/c/credit_crisis/financial_regulatory_reform/index.html.

[112] *See* American Recovery and Reinvestment Act of 2009, Pub. L. 111-5 (a $787 billion stimulus).

[113] See Shaila Dewan, *Zero Job Growth Latest Bleak Sain for U.S. Economy*, N.Y. TIMES, Sept. 2, 2011, *available at* http://www.nytimes.com/2011/09/03/business/economy/united-states-showed-no-job-growth-in-august.html.

[114] *See* White House Blog, *Making Home Affordable Campaign to Help American Homeowners*, Dec. 1, 2009, *available* at http://www.whitehouse.gov/blog/2009/12/01/making-home-affordable-campaign-help-america-s-homeowners. *See also* Tami Luhby, *Obama Expands Mortgage Modification Effort*, CNN MONEY, Mar. 26, 2010, *available at* http://money.cnn.com/2010/03/26/news/economy/Obama_mortgage_relief/.

[115] Neil M. Borofsky, *Where the Bailout Went Wrong*, N.Y.Times Mar. 29,2011 (Neil Borofsky was the TARP Inspector General until March 2011), *available at* http://www.nytimes.com/2011/03/30/opinion/30barofsky.html; *see also* Office Of the Special Inspector General for the Troubled Asset Relief Program, *Quarterly Report to Congress*, Apr. 28, 2011, at 57-101, *available at* http://www.sigtarp.gov/reports/congress/2011/April2011_Quarterly_Report_to_Congress.pdf.

from revaluing their assets to the current market value.[116] The Fed saved the banks from being "equitably" insolvent—not being able to pay their debts as they came due—by creating profits for banks by lending them funds, in some cases at almost a zero interest rate.[117]

As the foreclosures exploded—it has been estimated that foreclosures will number between 8 million and 13 million filings before the crisis runs its course[118]—it became apparent that the mortgage servicers—basically the big banks—had inadequate records and often had no idea where the underlying notes resided.[119] So, in many instances, they falsified court documents when foreclosures were initiated. Litigation ensued.[120]

The much-maligned Democratic House in 2008-2010 (which lost control to the Republicans in 2010 due, in part, to voter anger over Wall Street being bailed out but nothing being done for Main Street) actually passed legislation which might have stemmed the decline of the housing market. The Helping Families Save Their Homes Act of 2009[121] would have, in effect, enabled homeowners to file bankruptcy but to retain their homes with a modified mortgage reflecting the current value of the property. However, the Democratic Senate, which basically needed sixty votes to pass legislation because of Republican filibusters, failed to pass the legislation.

By giving homeowners the option to file bankruptcy and keep their homes with a modified mortgage, lenders would have had an incentive to negotiate private modifications outside bankruptcy. This could have stemmed the tide of foreclosures. However, this approach was opposed by many as involving moral hazard, since it would reward some who had improvidently borrowed more than they could repay to buy a home that was beyond their means.

On the other hand, when a lender forecloses, the most the lender will realize is the current market value, and oftentimes substantially less. The glut of foreclosures has left neighborhoods with empty homes, encouraged vandalism, and triggered further drops in property value.[122] In addition, foreclosures have increased the supply of homes in the market at a time when there are fewer buyers because of the economy. Thus, foreclosures exacerbate the downward pressure on

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[116] FASB Staff Position FAS 157-4, *Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly*, FASB (Apr. 9, 2009), *available at* http://www.fasb.org/cs/BlobServer?blobcol=urldata&blobtable=MungoBlobs&blobkey=id&blobwhere=1175820922722&blobheader=application%2Fpdf.

[117] Jesse Eisinger, *How the U.S. Shelters and Subsidizes the Banking Industry*, N.Y.TIMES, June 30, 2011 ("When the Federal Reserve lowers interest rates to help buoy the economy during a slowdown, banks are the first beneficiaries. As the Fed lowers short-term rates, banks borrow cheaply and lend out for a lot more, making any new lending highly profitable"), *available at* http://query.nytimes.com/gst/fullpage.html?res=9B07E1DA1131F933A05755C0A9679D8B63.

[118] Barofsky, *supra* note 115.

[119] John Carney, *A Primer On the Foreclosure Crisis*, CNBC.COM (Oct. 11, 2010, 2:48 PM), http://www.cnbc.com/id/39617381/A_Primer_On_The_Foreclosure_Crisis.

[120] Margaret Cronin Fisk & Kathleen M. Howley, *The Foreclosure Mess Could Last For Years*, BUS. WK. (Oct. 6, 2010, 11:00 PM), http://www.businessweek.com/magazine/content/10_42/b4199043406256.htm.

[121] H.R. 1106, 111th Cong. (2009), *available* at http://www.govtrack.us/congress/bill.xpd?bill=h111-1106

[122] Christine Vidmar, *Seven Ways Foreclosures Impact Communities*, NEIGHBORWORKS AMERICA (Aug. 2008), http://www.nw.org/network/neighborworksprogs/foreclosuresolutions/reports/documents/7ForeclosureImpacts.pdf.

housing prices, which not only depresses the housing market but also impedes economic recovery.[123]

While the Obama administration has come up with another mortgage modification plan[124] and the recent settlement between the state attorney generals and the big banks, provides, some relief to borrowers,[125] these small steps are a long way from resolving the foreclosure problem.

Basically, this situation is what innovation has wrought. The impact of innovation will be further explored in the next section.

IV. Financial Innovation

A. Has Financial Innovation Created Value?

Alan Greenspan, while chairman of the Federal Reserve Board, was a strong advocate for financial innovation:

> Alan Greenspan has presented a free market defense of financial innovations based on Joseph A. Schumpeter's theory that innovations initiate a dynamic process of 'creative destruction' in a capitalistic system….
>
> As Chairman of the Federal Reserve Board, Greenspan's interpretation of the Schumpeterian role of financial innovations in the 'New Economy' has had important consequences. It had an influence on the Fed's passive response to the emergence of a speculative bubble in the financial markets, on the one hand, and its proactive response to the collapse of a large hedge fund which suffered huge losses on derivative contracts, on the other. It was reflected in Greenspan's testimonies that influenced the US Congress to

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[123] Robert J. Barro, *How to Really Save the Economy*, N.Y. TIMES (Sept. 10, 2011), http://www.nytimes.com/2011/09/11/opinion/sunday/how-to-really-save-the-economy.html.

[124] *See Obama Outlines Broader Housing Push*, CBS MONEY WATCH (Feb. 1, 2012 11:33 AM), http://www.cbsnews.com/8301-505145_162-57369654/obama-outlines-broader-housing-plan (explaining President Obama's new proposal to allow homeowners to refinance mortgages at lower interest rates, even if they owe more than the house is worth). *See also* Kenneth R. Harney, *Obama's refinancing plan contains elements that don't need approval by Congress*, WASH. POST (Feb. 10, 2012), http://www.washingtonpost.com/realestate/obamas-refinancing-plan-contains-elements-that-dont-need-approval-by-congress/2012/02/06/gIQAd9ll4Q_story.html (describing the various portions of President Obama's mortgage proposal and discussing the likelihood of passage for each proposal).

[125] *See* Nelson D. Schwartz & Shaila Dewan, States Negotiate $26 Billion Agreement for Homeowners, N.Y. TIMES (Feb. 8, 2012), http://www.nytimes.com/2012/02/09/business/states-negotiate-25-billion-deal-for-homeowners.html (explaining the settlement agreed to by government officials and five large banks). See Help for Some Homeowners, N.Y. TIMES (Feb. 8, 2012), http://www.nytimes.com/interactive/2012/02/09/business/help-for-some-homeowners.html, for a graphic depicting the breakdown of how the settlement money will be used. *See also Landmark Settlement, Landmark Relieve*, NATIONAL MORTGAGE SETTLEMENT (Feb. 9, 2012), http://www.nationalmortgagesettlement.com/ (containing specific details about the mortgage settlement, along with resources for borrowers).

> exempt over-the-counter financial derivatives from government regulation and to repeal the Glass–Steagall Act's separation of commercial and investment banking.[126]

But derivatives were not the only innovation favored by Chairman Greenspan. He was also a strong advocate of the "benefits" of subprime lending. In 2005, when subprime lending was gearing up to sink the economy, he stated:

> Innovation has brought about a multitude of new products, such as subprime loans and niche credit programs for immigrants. . . . With these advances in technology, lenders have taken advantage of credit-scoring models and other techniques for efficiently extending credit to a broader spectrum of consumers. . . . Where once more-marginal applicants would simply have been denied credit, *lenders are now able to quite efficiently judge the risk posed by individual applicants and to price that risk appropriately.* These improvements have led to rapid growth in subprime mortgage lending . . . fostering constructive innovation that is both responsive to market demand and beneficial to consumers.[127]

With a bias such as this, it is no wonder that Greenspan took no steps to regulate the banking industry's obsession with subprime loans.

But isn't innovation good? Americans generally hold innovation in high regard. However, there are substantial differences between financial innovation and technological innovation. Technological innovation often starts in the lab or garage or basement. It is tested and challenged and scaled up. It is generally based upon scientific principles that have been developed, tested and replicated over time. Its development is frequently funded by outside sources which provide another level of accountability.

This is not to say that technical innovation has not had its dark side. Decades ago, the dangers of DDT were brought to the public by Rachel Carlson's "Silent Spring."[128] Today, the whole world is aware of the risks of nuclear power from the meltdown in Japan.[129] But, on balance, while technical innovation has produced great private profit, it has also produced extraordinary social benefits. Health care advances have saved millions of lives,[130] agricultural developments have enabled us to grow 200 bushels of corn per acre where formerly we could

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[126] Charles G. Leathers & J. Patrick Raines, *The Schumpeterian Role of Financial Innovations In the New Economy's Business Cycle*, 28 Cambridge Journal of Economics 667, 667 (2004).
[127] Alan Greenspan, Chairman of the Federal Reserve, Federal Reserve System's Fourth Annual Community Affairs Research Conference, Consumer Finance, Washington, D.C. (Apr. 8, 2005) (transcript available at http://www.federalreserve.gov/BoardDocs/speeches/2005/20050408/default.htm) (emphasis added).
[128] *See* RACHEL CARSON, SILENT SPRING (1962).
[129] Floyd Norris, *Japan's Meltdown and the Global Economy's*, N.Y. TIMES (Mar. 17, 2011), http://www.nytimes.com/2011/03/18/business/18norris.html.
[130] Dan Childs & Susan Kansagra, M.D., *10 Health Advances That Changed the World*, ABC NEWS (Sept. 20, 2007), http://abcnews.go.com/Health/TenWays/story?id=3605442.

only grow twenty,[131] and the computer and the Internet have created whole new industries and millions of jobs.[132]

To put financial innovation on the same continuum as technical innovation is disingenuous. Financial innovation was done, not in the basement, but by overpaid quants working for billion dollar corporations.[133] There is no question but that financial innovation has created incredible wealth on the private side.[134] However, any benefits are difficult to quantify. The creation of structured financial products, for example, could enable an insurance company or pension fund to better match the liability side –the maturities of payment obligations –with the asset side by fine tuning the relationship of maturities to return on the asset side.

But, insurance companies and pension funds have functioned adequately with less "sophisticated" –read complicated and possibly incomprehensible –products in the past. Because of the complexity of these products,[135] they became the province of our huge, well-capitalized and diversified big banks, thus giving them another competitive advantage over the smaller and mid-size banks.[136] In addition, the financial incentives to selling these products led the big banks to continue to push the envelope in terms of risk.

Let us consider financial innovation in more depth. Banks do not create value. They are intermediaries who direct funds from investors into productive investments. But, instead of fulfilling this function, they created financial products and, in the process, consumed large amounts of capital. In 1978, banks and related institutions borrowed $13 in the credit markets for every $100 borrowed by the real economy; by 2007, this had grown to $51.[137] This measures only balance sheet assets; it does not take into account derivatives which have grown exponentially from the 1990s to today.[138]

Consider financial products. Start with 1000 homes. Create 1000 mortgages. Put 100 of each into an asset backed security. We now have 10 pools of mortgages and each pool can be divided into units and sold to numerous investors. In a pristine mortgage backed security ("MBS"), each unit would have the same undivided interest in each mortgage. Alternatively, we could divide the pool into three tranches: senior, intermediary, and junior, and create what are known as "collateralized debt obligations" (CDOs). The senior tranche would be paid before the

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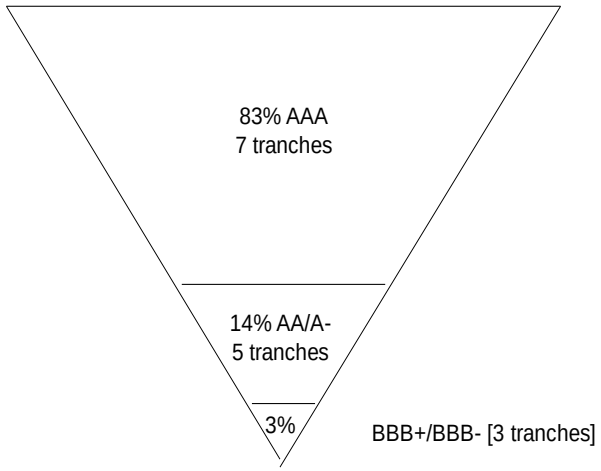
[131] *See* MICHAEL POLLAN, THE OMNIVORE'S DILEMMA 33-56 (2006).
[132] *See* Michael J. Mandel, *Jobs: The Lull Will Linger*, BUS. WK. (Oct. 25, 2004), http://www.businessweek.com/magazine/content/04_43/b3905044_mz011.htm; Paul Krugman, *Job Creation?*, THE CONSCIENCE OF A LIBERAL (Jun. 11, 2008, 8:25 AM), http://krugman.blogs.nytimes.com/2008/06/11/job-creation/.
[133] *See* Matthew Philips, *Revenge of the Nerd*, NEWSWEEK, May 28, 2009, *available at* http://www.thedailybeast.com/newsweek/2009/05/28/revenge-of-the-nerd.html. *See also*, SCOTT PATTERSON, THE QUANTS (2010).
[134] Louise Story, *Times Topics: Executive Pay*, N.Y. TIMES (Mar. 3, 2011), http://topics.nytimes.com/top/reference/timestopics/subjects/e/executive_pay/index.html.
[135] *See infra* text *accompanying* note 139.
[136] See infra note 185 and accompanying text.
[137] See 13 BANKERS , *supra* note 15, at 59-60. See FEDERAL RESERVE FLOW OF FUNDS,TABLE L1, *available at* http://www.federalreserve.gov/releases/z1/current/z1r-4.pdf, for current data on credit market debt outstanding.
[138] The volume of OTC derivative contracts was $80 trillion in 1999. The volume has grown to $600 trillion in ten years. BANK OF INTERNATIONAL SETTLEMENTS, SEMIANNUAL OTC DERIVATIVES STATISTICS AT END-DECEMBER 2009, Table 19, *available at* http://www.bis.org/statistics/otcder/dt1920a.pdf.

holders of the intermediate and junior tranches, and, subject to the prior right of the senior tranche holders, the holders of the intermediate tranche would be paid before the holders of the junior tranche. Assume, because of their relative riskiness, securities in the senior tranche would earn 4.5%; in the intermediate tranche, 6%; and the junior tranche, 7.5%. Assuming all three tranches were entitled to one-third of the income from the mortgages and one-third of the principal upon repayment, subject to the above prioritization, one might intuitively think that then the senior tranche might be rated AAA because of its preferred claim to income and assets, the intermediate tranche A, and the junior tranche B.

The above description reflected a cylinder analogy, with three different equal levels. But in the real world, this analogy fails since not all tranches have equal value. A more accurate analogy would be that of an inverted cone:



Moreover, there would be many more tranches than three. One security I examined had fifteen tranches. Eight of the tranches had AAA credit ratings, but these eight tranches composed 83% of the value of the offering. The lowest three tranches were rated BBB+/BBB- but comprised only three percent of the offering. These lower three trenches were the "foundation" upon which the AAA securities above rested.[139]

[139] *See, e.g.,* Ameriquest Mortgage Securities, Inc/Asset Backed Pass-Through Certificates/ Series 2005-R11, Prospectus (Form 424B5) (Dec. 19, 2005) *available at* ttp://www.sec.gov/Archives/edgar/data/1347199/000089109205002534/e23035_424b5.txt (In a $1,793,610,000 offering of mortgage backed securities, five tranches totaling $1,483,410,000 were rated AAA, and another seven tranches totaling $251,650,000 were rated A- or better. The last three tranches, rated BBB+ to BBB-, totaled only $58,550,000. So, while there were twelve tranches below the AAA tranches, they totaled only 17% of the offering).

But we are not yet done. In the simple illustration of three tranches, we could take the BBB-rated tranches from three different pools, put them in a new container, sometimes called a collateralized debt obligation squared (CDO^2), and retranche. Now, even though all the securities are rated BBB, the new senior tranche could be rated AAA and even carry a higher rate than the AAA rated security in the predecessor MBS because of the greater interest entitlement of the new CDO (its underlying securities pay 7.5%).

But, yet, there is more. We could now write credit default insurance against the failure of the CDO's to pay out. Thus the creation of credit default swaps (CDSs) and the creation of synthetic CDOs. We could create another pool of investor funds which would guarantee the payments of the CDO in exchange for a premium.

One way to bet against the housing market would be to buy protection in the form of CDSs. This is essentially what occurred in the Abacus transaction in which the SEC sued Goldman Sachs for creating a synthetic CDO without disclosing that the CDO was created at the insistence of John Paulson, who wanted to bet against the housing market.[140] Thus, it was in his interest to have the CDO guarantee securities likely to default. Goldman Sachs permitted Paulson to participate in the selection of securities without disclosing his adverse interest to investors. While Goldman earned commissions and fees up front, it also "earned," or rather paid, a $550 million settlement .[141]

Where is the value in the foregoing chain? One rationale is that it is possible to manufacture securities with varying rates of return commensurate with different levels of risk. But at what cost? These banking innovations have brought the world economy, not just that of the United States, to the brink of collapse. What has also been demonstrated by the financial meltdown is that financial managers greatly overestimated their ability to measure and control risk.

While the benefits from financial innovation are tenuous –except for the compensation packages they generated –the social costs were disastrous. The end result of these innovations was the worst financial crisis since the Great Depression of the 1930s. GDP growth dropped to a negative 9%[142] and unemployment approached 10%.[143] Under employment was even higher.[144]

B. Economic and Political Costs of Financial Innovation

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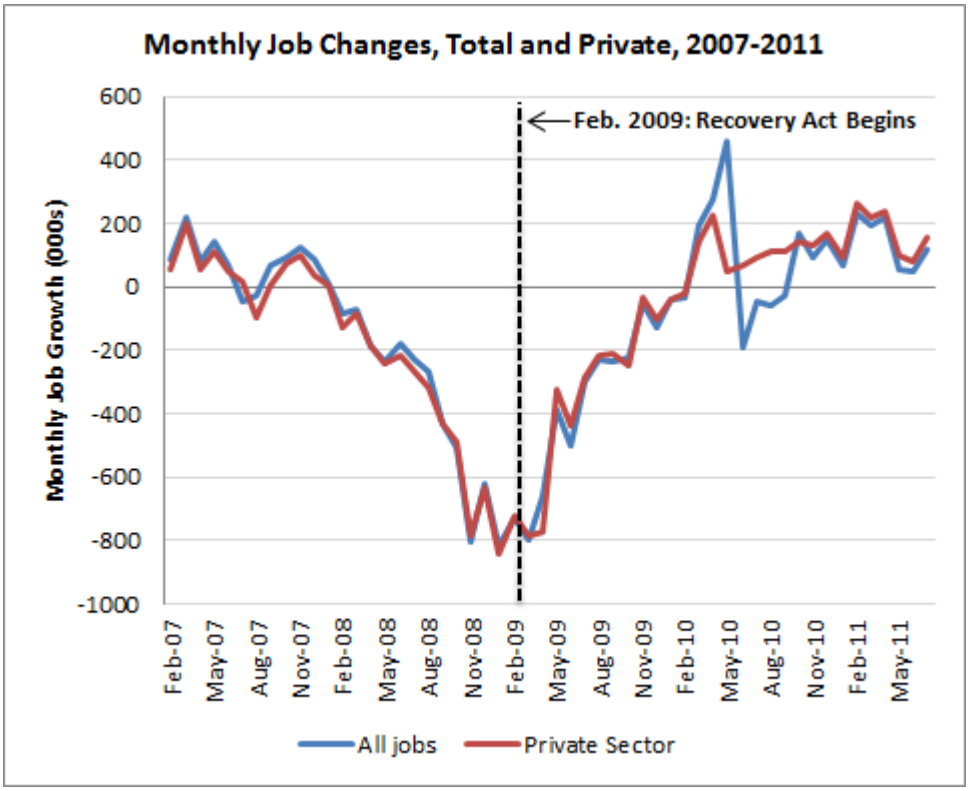
[140] Sec. & Exch. Comm'n v. Goldman Sachs & Co., 790 F. Supp. 2d 147 (S.D.N.Y. 2011).
[141] Press Release, Sec. & Exch. Comm'n, Goldman Sachs to Pay Record $550 Million to Settle SEC Charges Related to Subprime Mortgage CDO (July 15, 2010) *available at* http://www.sec.gov/news/press/2010/2010-123.htm.
[142] Jared Bernstein, *The Impact of the Recovery Act, In A Few Easy Charts,* ON THE ECONOMY BLOG (Aug. 31, 2011), *available at* http://jaredbernsteinblog.com/the-recovery-act-worked-in-a-few-easy-charts/.
[143] *Id.*
[144] *See* U.S. DEP'T OF LABOR BUREAU OF LABOR STATISTICS, CURRENT POPULATION SURVEY 46, 51 (Jan. 2011) *available at* http://www.bls.gov/cps/cpsa2010.pdf.

We are now almost four years past the September-October 2008 focus of the meltdown and unemployment has just fallen below 9%,[145] while job creation has stagnated, as reflected in the chart below:[146]



The depth of the downturn and the tepidness of the recovery are far worse than any other downturn since the Great Depression:[147]

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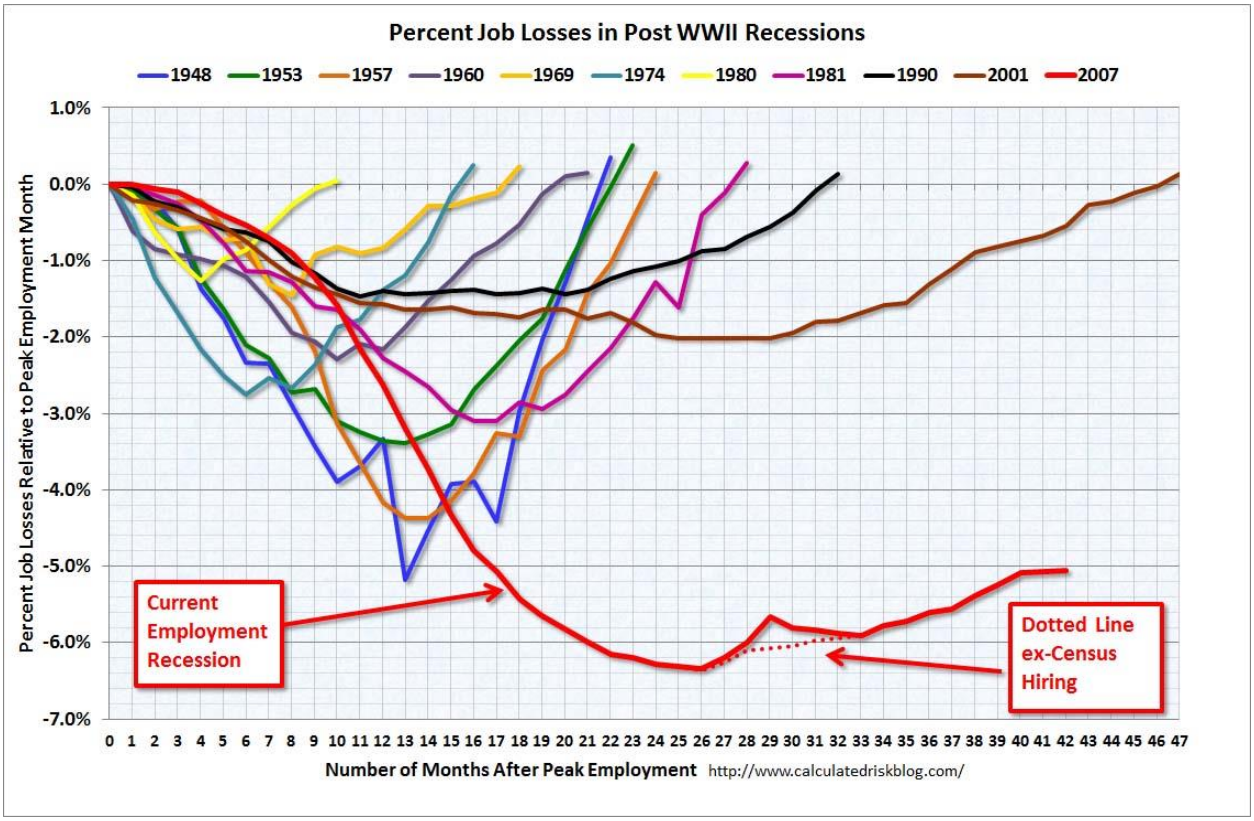
[145] Jared Bernstein, *supra* note 142.
[146] *Id.*
[147] See *Percent Job Losses in Post WWII Recessions*, CALCULATED RISK, (July 8, 2011), *available at* http://cr4re.com/charts/charts.html http://4.bp.blogspot.com/-EQhAKiXaEJQ/TyvqgkFWwSI/AAAAAAAAMDM/G_ErFTiSxkM/s1600/PercentJobLossesJan2012.jpg. *See also* Bob Willis, *U.S. Recession Worst Since Great Depression, Revised Data Show*, BLOOMBERG (Aug. 1, 2009) *available at* http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aNivTjr852TI (discussing a report issued by the U.S. Department of Commerce).



The costs associated with bailing out the big banks have been not just economic, but also political. Republicans have touted their 2010 victory as vindicating their policies of cutting spending and rejecting tax cuts.[148] However, the more accurate reading of the 2010 election is that it reflected an anger toward a political system that bailed out bankers but not homeowners,[149] and held no one in the banking system accountable.[150] Unlike the savings and loan crisis, nobody has gone to jail and compensation remains at obscene levels in the banking industry.[151]

On the other hand, the earlier Bush tax cuts, stimulus programs and decreased tax revenues due to the severe recession, contributed to the bulk of the budget deficits that

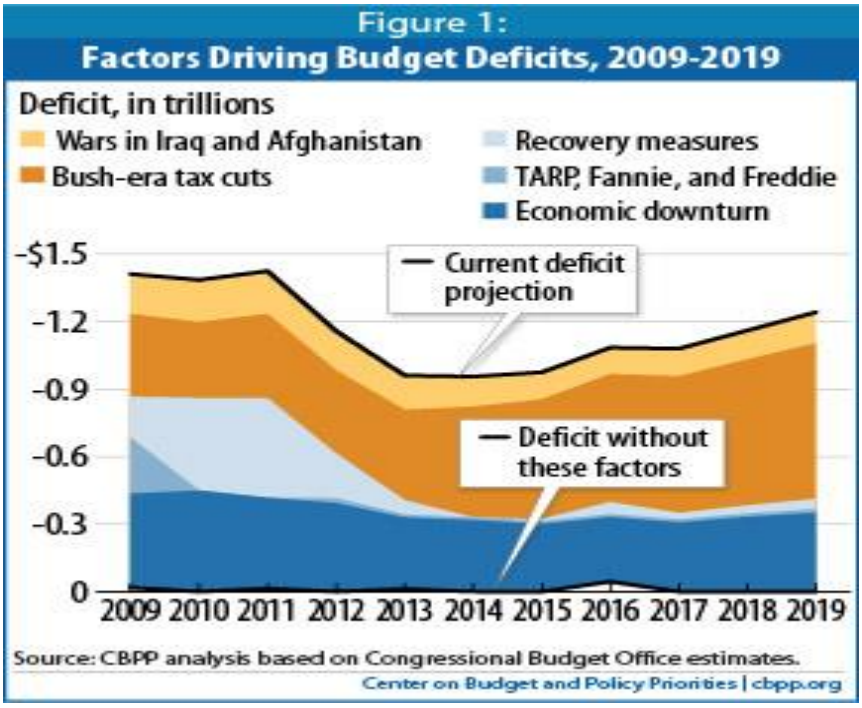
[148] *Republicans Win House Majority, Make Senate Gains in Wave Election*, FOX NEWS (Nov. 2, 2010) http://www.foxnews.com/politics/2010/11/02/poll-closing-key-east-coast-races-balance-power-line/ (explaining that Republican candidates were "riding a wave of voter frustration over the economy and federal government itself," and quoting the newly-elected House Republican Leader John Boehner as promising to fulfill the Republican pledge to cut government spending and reduce the size of the federal government).

[149] Adam Nagourney, *Bracing for a Backlash Over Wall Stree Bailouts*, N.Y. TIMES, Mar. 15, 2009, at A1. a*vailable at* http://www.nytimes.com/2009/03/16/us/politics/16assess.html

[150] Gretchen Morgenson and Louise Story, *In Financial Crisis, No Prosecutions of Top Figures*, N.Y. TIMES, Apr. 14, 2011, *available at* http://www.nytimes.com/2011/04/14/business/14prosecute.html.

[151] *Id. See also* Peter Lattman, *Holder Defends Efforts to Fight Financial Fraud*, N.Y. Times (Feb. 23, 2012), *available at* http://dealbook.nytimes.com/2012/02/23/holder-defends-efforts-to-combat-financial-fraud/ (explaining that while President Obama announced his commitment to combat financial fraud, the Just Department has not pursued criminal cases against banking executives involved in the 2008 global financial crisis).

approximated $1.4 trillion and $1.3 trillion in fiscal year 2009 and 2010. The increase in costs and decrease in revenue are not sustainable. See below:[152]



While the deficits are projected to decrease, the net effect of the economic downturn and governmental response was that we reached our debt limit of $14.3 trillion in August, 2011,[153] which generated the ensuing rancor,[154] a consequence of which makes it highly unlikely that

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[152] Chad Stone, *Testimony of Chad Stone, Chief Economist Before the Joint Economic Committee of the U.S. Congress, Hearing on "Spend Less, Owe Less, Grow the Economy,"* CENTER ON BUDGET AND POLICY PRIORITIES, fig. 1, pg. 4, June 21, 2011 *available at* http://www.cbpp.org/files/6-21-11bud-test.pdf.

[153] Jackie Calmes & Carl Hulse, *As Federal Government Hits Its Debt Limit, Lawmakers Spar Over Solution*, N.Y. TIMES (May 16, 2011), *available at* http://www.nytimes.com/2011/05/17/us/politics/17budget.html (explaining that the government reached its debt limit in May 2011, but that, due to "extraordinary measures," default would not occur until approximately August 2, 2011).

[154] Nikola G. Swann, UNITED STATES OF AMERICA LONG-TERM RATING LOWERED TO AA+ ON POLITICAL RISKS AND RISING DEBT BURDEN; OUTLOOK NEGATIVE, STANDARD & POORS 3 (Aug. 5, 2011), *available at* http://www.standardandpoors.com/servlet/BlobServer?blobheadername3=MDT-Type&blobcol=urldata&blobtable=MungoBlobs&blobheadervalue2=inline%3B+filename%3DUS_Downgraded_AA%2B.pdf&blobheadername2=Content-Disposition&blobheadervalue1=application%2Fpdf&blobkey=id&blobheadername1=content-type&blobwhere=1243942957443&blobheadervalue3=UTF-8 (explaining that "the prolonged controversy over raising the statutory debt ceiling and the related fiscal policy debate indicate that further near-term progress containing the growth in public spending, especially on entitlements, or on reaching an agreement on raising revenues is less likely than we previously assumed and will remain a contentious and fitful process"). *See also*, Damian Paletta & Matt Philips, *S&P Strips U.S. of Top Credit Rating*, WALL ST. J. (Aug. 6, 2011), *available at* http://online.wsj.com/article/SB10001424053111903366504576490841235575386.html.

substantial Federal funds would be available to alleviate continued unemployment or to stimulate growth.[155]

While spending as a percentage of GDP has hovered around 20-22 percent for the past three decades, in fiscal year 2009 it rose to 25%;[156] similarly, revenues for the past three decades have hovered around 18% of GDP, but fell to 14.9% in fiscal year 2009.[157] While it has been fashionable to assert that we have a spending problem, not a revenue problem,[158] the reality is that there is both a serious spending and a serious revenue problem as a result of the financial crisis.

Warren Buffett's characterization of derivatives as "instruments of mass destruction"[159] has proved all too true. Moreover, the misallocation of capital to risky mortgages instead of productive investment has devastated household net worth,[160] exacerbated household debt, and crippled consumer spending as a vehicle out of our present malaise.[161] Our economy cannot afford the mammoth "diversified" financial institutions which we have permitted to conglomerate, and thereby create and market the financial innovations which have truly privatized profit and socialized risk.

V. Are Big Banks Too Big?

Dodd-Frank was supposed to end the problem of "too big to fail" by creating an orderly liquidation authority (OLA) to provide the federal government with the power to liquidate banks

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[155] President Obama signed into law the Middle Class Tax Relief and Job Creation Act of 2012, H.R.3630, 112th Cong. (2012), which extended the payroll tax reduction of two percentage-points and jobless benefits to cover between 63 and 73 weeks. *Obama signs payroll tax cut extension into law, includes jobless benefits*, Wash. Post (Feb. 22, 2012), *available at* http://www.washingtonpost.com/business/economy/obama-signs-payroll-tax-cut-extension-into-law-includes-jobless-benefits/2012/02/22/gIQArSaAUR_story.html. However, additional fiscal stimulus or federal bailout money is extremely unlikely. *See* Annalyn Censky & Charles Riley, *What's in Obama's stimulus plan*, CNN MONEY (Sept. 8, 2011), *available at* http://money.cnn.com/2011/09/08/news/economy/obama_stimulus_plan/index.htm (explaining how President Obama's recent proposal for $447 billion in fiscal stimulus "has almost no chance of passing" the Republican-controlled House of Representatives).

[156] OFFICE OF MANAGEMENT AND BUDGET, HISTORICAL TABLES FY 2011, table 1.2, at 24-25 (2011), *available at* http://www.gpoaccess.gov/usbudget/fy11/pdf/hist.pdf.

[157] *Id.*

[158] David Weigel, *"It's Not a Revenue Problem. It's a Spending Problem": Tracing the History of a GOP Talking Point*, SLATE (Apr. 18, 2011), *available at* http://www.slate.com/id/2291530/ (quoting Speaker of the House John Boehner, Majority Leader Eric Cantor, and Orrin Hatch, each saying variations of the phrase "Washington does not have a revenue problem. It's got a spending problem.").

[159] Paul B. Farrell, *Derivatives the New 'Ticking Bomb,'* WALL ST. J. (Mar. 10, 2008), *available at* http://www.marketwatch.com/story/derivatives-are-the-new-ticking-time-bomb?print=true&dist=printTop (quoting Buffet's 2002 letter to shareholders of Berkshire Hathaway). The use of derivatives is alleged to have contributed to the current economic crisis in Europe since Greece used derivatives developed by Goldman Sachs and other investment bankers to hide its shaky financial position. *See* Louise Story, Landon Thomas Jr., & Nelson D. Schwartz, *How Wall Street Helped Mask Europe's Debt,* N. Y. TIMES (Feb. 15, 2010), *available at* http://dealbook.nytimes.com/2010/02/15/wall-st-helped-to-mask-debt-fueling-europes-crisis/.

[160] FEDERAL RESERVE BOARD, SURVEYING THE AFTERMATH OF THE STORM: CHANGES IN FAMILY FINANCES 2007-2009, Mar. 2011, *available at* http://www.federalreserve.gov/pubs/feds/2011/201117/201117pap.pdf.

[161] *Id.* at 22.

that have failed, without jeopardizing the economy.[162] This provision was supposed to end taxpayers footing the bill when a large institution fails. The Act specifically provides that companies put into receivership should be liquidated, that all funds expended in the liquidation should be recovered from the assets of the company or from the financial sector through assessments, and that no part of the losses should be borne by the taxpayers.[163]

This sounds good. The era of privatizing profits and socializing losses is supposedly over. However, not everyone accepts that premise. For example, a recent report by Standard & Poor's opines that, "given the importance of confidence sensitivity in the effective functioning of banks, we believe that under certain circumstances and with selected systemically important financial institutions, future extraordinary government support is still possible."[164] The report also opined that "implementation of OLA could increase uncertainty in the market at a time when confidence needs boosting. For instance, dismantling a large financial firm might spur creditors to pull out of other similar financial firms in times of stress."[165] The report also noted that the history of governmental support reflects a mindset that may not go away. Surprisingly, the report concluded that it agreed with Chairman Greenspan that "[i]f they're too big to fail, they're too big."[166]

A. How big is too big?

Senator Sherrod Brown was quoted last year as stating that 15 years ago the assets of the six largest banks in this country totaled 17% of GDP, whereas the assets of the six largest banks now total 63% of GDP. [167] Certainly, statements by politicians need to be taken with a grain of salt, even where, as with Senator Brown, his sources were Simon Johnson, the former chief economist of the International Monetary Fund, and the book Johnson co-authored with James Kwak.[168] Accordingly, PolitiFact compared Johnson's numbers with those obtained from the Federal Reserve Bank of Philadelphia and found that Senator Brown was right on. The following is the data from the Fed: [169]

<u>Assets (in billions), Dec. 31, 2009</u>
Bank of America Corp. - 2,224.5
JP Morgan Chase - 2,032.0

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[162] H.R. 4173, Title II, §§ 201-217 (2011).
[163] H.R. 4173, Title II, § 214 (2011).
[164] STANDARD & POOR'S, THE US GOVERNMENT SAYS SUPPORT FOR BANKS WILL BE DIFFERENT "NEXT TIME"--BUT WILL IT? 2 (July 12, 2011), *available at* http://www.politico.com/pdf/PPM223_7-12-11_-_the_us_government_says_support_for_banks_will_be_different_nexttime_but_will_it_071211.pdf.
[165] *Id.* at 3. *See also supra* text at notes 106-108(discussing the effect of Lehman's bankruptcy).
[166] Standard & Poor's, *supra* note 164, at 10.
[167] 156 Cong. Rec. 57, S2519-S2528 (daily ed. Apr. 21, 2010) (statement of Sen. Sherrod Brown), *available at* http://www.gpo.gov/fdsys/pkg/CREC-2010-04-21/html/CREC-2010-04-21-pt1-PgS2519.htm. *See* also Interview by Jake Tapper with Austan Goolsbee of President Obama's Council of Economic Advisers, Senator Bob Corker (R-TN) and Senator Sherrod Brown (D-OH), ABC This Week, Apr. 25, 2010, *available at* http://abcnews.go.com/ThisWeek/week-transcript-goolsbee-brown-corker/story?id=10469580.
[168] 13 BANKERS, *supra* note 14.
[169] *Six Biggest Banks Getting Bigger, Brown Says,* POLITIFACT, Apr. 27, 2010, *available at* http://www.politifact.com/truth-o-meter/statements/2010/apr/27/sherrod-brown/six-largest-banks-getting-bigger-brown-said/.

Citigroup - 1,856.6
Wells Fargo - 1,243.6
Goldman Sachs - 849.3
Morgan Stanley - 771.5
Total 8,977.5
Nominal GDP 14.453.8
Percentage 62.1%

Assets (in billions), Dec. 31, 1994
Citicorp - 250.5
BankAmerica Corp. - 215.5
Chemical Banking Corp. - 171.4
Nationsbank Corp. - 169.6
JP Morgan - 154.9
Chase Manhattan - 114.0
Total 1,075.9
Nominal GDP 7,248.2
Percentage 14.8%

The June 30, 2011 listing of "Large Commercial Banks" by the Federal Reserve lists the consolidated assets of J.P. Morgan Chase at $1.79 trillion, Bank of America at $1.45 trillion, Citibank at $1.21 trillion and Wells Fargo at $1.1 trillion.[170] Goldman Sachs and Morgan Stanley were not listed in this group, apparently because they are basically investment banks that elected bank holding company status to access federal funds.[171] But U.S. Bank, the fifth-largest bank listed, has only $310 billion in consolidated assets, and there are only two other banks that have over $200 billion in assets. Clearly, the "big banks" are out of whack with the rest of the banking system.

How did the big banks get so big? Other than Goldman Sachs, this occurred by acquisition after acquisition, some of which were encouraged by the government during the financial crisis. Appendix I traces the acquisition activity that led to this consolidation and indicates the relative size of the combining financial entities in comparison to the gross domestic product of the United States. Most of the present "big banks" started at 1% to 2% of GDP but, through multiple acquisitions, now have reached 10% or more of GDP.

B. What Are the Consequences, or Lack Thereof, of "Too Big to Fail"?

It was these big banks, by financing the non-bank lenders which created the toxic mortgages which the big banks securitized into toxic securities, that were largely responsible for the financial crisis. And it was these big banks that absorbed most of the initial bailout money and

[170] FEDERAL RESERVE STATISTICAL RELEASE: LARGE COMMERCIAL BANKS AS OF JUNE 30, 2011, http://www.federalreserve.gov/releases/lbr/current/default.htm.
[171] Robert Schroeder, *Goldman, Morgan to Become Holding Companies*, MARKETWATCH (Sept. 21, 2008), *available at* http://www.marketwatch.com/story/goldman-sachs-morgan-stanley-to-become-bank-holding-companies.

took advantage of much of the minimal-interest money that the Fed made available.[172] Unfortunately, it is also these big banks that are not lending to the small- and mid-sized firms that are the engine of job creation.[173]

But unlike the auto bailout, and the failure of smaller banks, there were no consequences for the big banks and their management. As a condition of receiving federal money, GM was required to change its business plan, close some plants, renegotiate compensation with employees, and replace its CEO.[174] When smaller banks fail, the FDIC imposes a conservatorship, and, generally, its assets are sold to another bank. But management is replaced, and shareholders lose their investment. On the other hand, while we have bailed out the big banks, their management, which created the crisis, is still in place, and the traders that sunk the economy have kept their bonuses and have continued to be rewarded handsomely.[175] Shareholders have suffered market price losses, but have not been wiped out. Conversely, creditors have not suffered, thus rewarding their lack of due diligence in monitoring their loans. As long as government will bail out the banks, stakeholders can adopt a "what, me worry"-type approach.

Two Nobel prize-winning economists have argued that we should have employed a conservatorship model to the big banks, rather than a bailout model.[176] To President Obama's assertion that government ownership is not the American way, Prof. Stiglitz responded:

> But he was wrong: conservatorship, including the possibility of temporary government ownership when all else failed, was the traditional approach; the massive government gifts to banks were what was unprecedented. Since even the banks that were taken over by the government were always eventually sold, some suggested that the process be called pre-privatization.[177]

Supporting Prof. Stiglitz' argument, the FDIC lists almost 400 banks that have been placed in conservatorship or sold since September 2008.[178]

While, today, we tend to view the experience of other countries with disdain, the experience of Sweden could have been helpful. In 1991, Sweden did not let its banks slowly write off bad assets in the hope that earnings, over time, would return them to solvency, which is basically what we have done. Rather, Sweden forced the banks to recognize their losses and

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[172] Bradley Keoun, et al., *The Fed's Secret Liquidity Lifelines*, BLOOMBERG, *available at* http://www.bloomberg.com/data-visualization/federal-reserve-emergency-lending.
[173] *See,e.g.*, Joe Nocera, *Mr Banker, Can You Spare a Dime?* N.Y. TIMES (Sept. 9, 2011), *available at* http://www.nytimes.com/2011/09/10/opinion/nocera-mr-banker-can-you-spare-a-dime.html. *See also* statement of Sen. Sherrod Brown, *supra* note 167.
[174] Chris Isidore, *GM Bankruptcy: End of an Era*, CNNMONEY (June 2, 2009), *available at* http://money.cnn.com/2009/06/01/news/companies/gm_bankruptcy/.
[175] Stephen Gandel, *How Washington's Bailout Will Boost Wall Street Bonuses*, TIME (Oct. 27, 2008), *available at* http://www.time.com/time/business/article/0,8599,1853846,00.html.
[176] Paul Krugman, *All the President's Zombies*, THE CONSCIOUS OF A LIBERAL (Feb. 25, 2009), *available at* http://krugman.blogs.nytimes.com/2009/02/25/all-the-presidents-zombies/.
[177] JOSEPH E. STIGLITZ, FREEFALL: AMERICA, FREE MARKETS, AND THE SINKING OF THE WORLD ECONOMY 116-117 (2010).
[178] *See Failed Bank List*, FED. DEPOSIT INS. CORP., http://www.fdic.gov/bank/individual/failed/banklist.html (last visited Sept. 11, 2011).

nationalized one-fifth of the banking system. This is what we have done in the past with insolvent banks.[179] The result was that the Swedish economy turned around in two years.[180]

In the current European crisis, Iceland essentially followed the Swedish model, and Ireland rejected it. Iceland was an extreme example of a banking system dwarfing the economy. Between 2002 and 2008, the Icelandic banking system had grown to the point where its assets were eleven times gross domestic product. The Lehman Brothers bankruptcy triggered the collapse of Iceland's shaky banking system, and the government responded by seizing the banks, leaving the toxic assets with the old banks and setting up new ones with clean balance sheets, guaranteeing only domestic deposits.[181]

On the other hand, Ireland, fearing a capital flight, guaranteed the obligations of its banks, which were twice GDP. The net result was that the sovereign debt of Ireland increased to the point where Ireland's solvency became questionable, and interest rates on the Irish debt shot up. The European Central Bank opposed any losses on the senior debt; the net result was that the German banks and others who extended credit to the Irish banks were bailed out by the Irish taxpayers, while the Irish people bore the brunt of an austerity program which has kept the country in recession.[182]

C. Why the Big Banks Should Be Broken Up.

As Prof. Rajan pointed out in his paper on financial innovation and riskiness,

> As deregulation has increased competition for the best borrowers, and shaved margins from offering plain-vanilla products to those customers, large banks have reached out to nontraditional customers, or to traditional customers with innovative products.[183]

Because creation of these innovative products requires both large capital and a high-priced staff of quants, it is only the big banks that can offer such products. Thus, in addition to the "too big to fail" borrowing subsidy,[184] big banks are afforded another competitive advantage over other banks.

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[179] *See supra* note 174 (discussing how the U.S. generally deals with bank failures).
[180] See YALMAN ONARAN, ZOMBIE BANKS: HOW BROKEN BANKS AND DEBTOR NATIONS ARE CRIPPLING THE GLOBAL ECONOMY 137-138 (2012).
[181] *Id*. at 67-72.
[182] *Id*. at 51-63.
[183] Rajan, *supra* note 95, at 6.
[184] After the Continental Bank bailout in 1984, the "too big to fail" syndrome created an implicit guarantee for large banks. But, after the financial bailout in 2008, Sheila Blair, the head of the FDIC, stated that the guarantee, which had been implicit, was now explicit and was giving large banks a competitive advantage. Paul Wiseman & Paliavi Gogoi, *FDIC Chief: Small Banks Can't Compete with Bailed-out Giants*, USA TODAY (Oct. 20, 2009) *available at* http://www.usatoday.com/money/industries/banking/2009-10-19-FDIC-chief-sheila-bair-banking_N.htm. The Center for Economic and Policy Research estimated that the taxpayer subsidy for large banks was $34 billion a year, a substantial advantage over smaller banks. Dean BAKER & TRAVIS MACARTHUR, CENTER FOR ECONOMIC AND POLICY RESEARCH ,THE VALUE OF THE "TOO BIG TO FAIL" BIG BANK SUBSIDY (2009), *available at* http://www.cepr.net/documents/publications/too-big-to-fail-2009-09.pdf.

Prof. Rajan also posited that executives are motivated to engage in risky transactions which produce high returns with apparently a low likelihood of risk, even though the risk might be catastrophic. He refers to this as the "hidden tail risk."[185] Consider Goldman Sachs' underwriting of the Abacus 2007-AC synthetic CDO, utilizing CDSs. Underwriting CDOs and CDSs clearly has been highly profitable. But when it was disclosed that the person who approached Goldman about creating the synthetic CDO by writing CDSs against pools of mortgages was an investor who wanted to bet against the real estate market, a fact that was not disclosed to investors, Goldman found itself in an SEC investigation,[186] and on the short end of a $550 million settlement.[187] Another example of catastrophic risk was AIG's issuance of CDSs. Management viewed the "premium" it was paid for standing behind the CDSs as almost "free money" since it never expected to pay out, and therefore held no reserves against potential loss. But when the mortgages against which the CDSs were written began to default, AIG failed, and the federal government bailed it out with over $100 billion.

As discussed earlier, Standard & Poor's was not convinced that the federal government support for banks "will be different 'next time'"[188] and opined that another bailout may be lurking in the future. Prof. Stiglitz has asserted that "[t]he financial sector used 'fear' to persuade the administration to impose no controls, just as it used fear to engineer the bondholder and shareholder protection schemes."[189] If another crisis occurs, we can expect the big banks to employ fear once again; in such circumstances, it is the rare politician who would have courage to run the risk of going against the big banks. Since both Alan Greenspan and Standard & Poor's agree that "[i]f there too big to fail, they're too big," the solution would seem to make them smaller, i.e., break them up.

Supposedly, banks are now limited in size to not having more than 10% of deposits.[190] But this control has already been breached.[191] Johnson and Kwak argue that commercial banks should be limited in size to 4% of GDP and investment banks to 2%.[192] With a GDP of approximately $14 trillion, commercial banks would be "limited" in size to "only" $560 billion of assets. While such a suggestion might appear radical, this would not even restore the situation that existed in the 1990s, before the spate of transactions outlined in Appendix I. The economy functioned quite well in the 1990s. To the argument that such a policy would inhibit innovation, millions of unemployed workers would be better off if the financial innovation of the 2000s had never come to pass.

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[185] Rajan, *supra* note 95, at 3, 20.
[186] Sec. & Exch. Comm'n v. Goldman Sachs & Co., 790 F. Supp. 2d 147 (S.D.N.Y. 2011).
[187] Press Release, Sec. & Exch. Comm'n, Goldman Sachs to Pay Record $550 Million to Settle SEC Charges Related to Subprime Mortgage CDO (July 15, 2010), *available at* http://www.sec.gov/news/press/2010/2010-123.htm.
[188] *See* STANDARD & POOR'S, *supra* note 164.
[189] JOSEPH E. STIGLITZ, *supra* note 177, at 325, n. 24.
[190] *See* H.R. 4173, § 623(a) (*adding* § (13) (A) to §18 (c) of the Federal Deposit Insurance Act (12 U. S. C. 1828 (c)), H.R. 4173, § 623(b) (*adding* §4 (i)(8) (A)(a) to the Bank Holding Company Act), and H.R. 4173, § 623(c) (*adding* § 10 (e)(2)(E) to the Homeowners Loan Act (12 U. S. C. 1467))
[191] Dealbook, *Merging Banks Surge Past U.S. Deposit Cap,* N.Y. TIMES (Oct. 17, 2008), *available at* http://dealbook.nytimes.com/2008/10/17/merging-banks-surge-past-us-deposit-cap/.
[192] 13 BANKERS, *supra* note 14,at 216-217.

While some might argue that it is not feasible to break up the big banks, interestingly, Reuters has already proposed a scenario for breaking up Goldman.[193] The suggestion was predicated upon trying to maximize shareholder value since Goldman is now trading at a depressed price. The article suggested breaking out Goldman's investment banking unit, the asset management unit, and the institutional client services arm. Supposedly, the pieces could be worth more than the whole.

The Reuters proposal followed a more extensive analysis by ProPublico, which argued that "breakups that seemed politically impossible [are] not longer unthinkable."[194] The biggest barrier to such breakups is the resistance of top management, who would earn less in smaller institutions. While the banks' internal diversification enhances profits by cross-referring clients, such diversification, and the conflicts of interest inherent in it, do not assure that clients are receiving the best services or the best deals.

Herb Allison, the former COO of Merrill Lynch and assistant secretary of treasury in the Obama administration, has now lent his support to the concept of breaking up the big banks.[195] He argues that breaking up the big banks would reduce complexity and risk. In particular, resulting entities would be easier to understand and control, thereby permitting realistic oversight by the boards of directors of the resulting entities. The cost of integrating, operating and modifying the complex systems in the conglomerated big banks would be reduced by removing organizational layers and coordination. Each new segment would need to acquire its own funding, which would lead to better assessment of capital and liquidity needs, and the various risks involved. Equally important, it would eliminate the conflicts of interest that are inherent in these large, multifaceted institutions.

While the so-called Volcker amendments to Dodd-Frank[196] do not reincarnate Glass-Steagall, they do limit the amount of proprietary trading in which financial institutions can engage. This can itself encourage financial institutions to break-up themselves by spinning off trading activities, assuming the regulations presently in process do not emasculate the limitations on trading. Former Chairman Volcker offered a clear choice to financial institutions heavily involved in trading: "give up either their proprietary trading activity or their banking license."[197]

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[193] *See* Rob Cox, *Breaking Up May Be Good for Goodman Sachs,* N.Y. TIMES (Sept. 8, 2011), *available at* http://www.nytimes.com/2011/09/08/business/breaking-up-could-be-good-for-goldman.html.

[194] Jesse Eisenger, *Once Unthinkable, Breakup of Big Banks Seems Feasible,* N.Y. TIMES (July 27, 2011), *available at* http://dealbook.nytimes.com/2011/07/27/once-unthinkable-breakup-of-big-banks-now-seems-feasible/.

[195] *See* HERB ALLISON, THE MEGABANK MESS (E-Book 2011), at location 658.

[196] Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 619, 124 Stat. 1376, 1620 (2010).

[197] Paul A. Volcker, COMMENTARY ON THE RESTRICTIONS ON PROPRIETARY TRADING BY INSURED DEPOSITARY INSTITUTIONS 3 (Feb. 2, 2012), *available at* http://online.wsj.com/public/resources/documents/Volcker_Rule_Essay_2-13-12.pdf. Chairman Volcker pointed out not only the risks of proprietary trading:

> On its face, proprietary trading entails substantial risks. It is essentially speculative in nature: securities are bought, held and sold in the expectation of profits from changes in market prices. The recent years of financial crisis have seen spectacular trading losses in large commercial and investment banks here and abroad operating on an international scale, with various loss estimates for major international commercial and investment banks ranging to hundreds of billions of dollars. *Id.* at 2.

but also, and equally important, the impact such trading has on the culture of banking:

But the simplified way to deal with the oversized institutions that are not only too big to fail, but also too big and complex to manage, is to impose objective size limits of the sort suggested by Johnson and Kwak and give management a fixed period of time to come into compliance. The benefits as discussed above, are manifold: less complexity, easier monitoring by the market and creditors, reduced conflicts of interest, stronger ties with local economies, more competition, and less innovation focused on creating incomprehensible financial instruments and more innovation focused upon servicing manufacturing and the real economy.

D. Regulators Need to Regulate

You do not want politics to infect the actions of the Federal Reserve Board. But the Chairman is appointed by the President and approved by the Senate.[198] While the appointment of the Chairman should not be politicized, the lessons of the past decade should make it clear that a libertarian ideologue is not the proper person to be in charge of economic policy.

Prof. Moss of Harvard has suggested that it was the success of the New Deal legislation, which provided 50 years of stability to the financial system when prior thereto there was a financial crisis every 15 to 20 years, that lulled us into complacency and made financial regulation seem to be an unnecessary burden.[199] He analogized the situation to public health: after sharply reducing deadly epidemics through public health measures, should policymakers abandon these measures, since major epidemics are not a problem anymore? He offered the following perspective on the past three decades:

> The magnitude of the current financial crisis reflects the failure of an economic and regulatory philosophy that proved increasingly influential in policy circles during the past three decades. This philosophy, guided more by theory than historical experience, held the private financial institutions not insured by the government could be largely trusted to manage their own risks--to regulate themselves. The crisis has suggested otherwise, particularly since several of the least regulated parts of the system (including non-bank mortgage originators and the major broker-dealer Bear Stearns) were among the first to run into trouble.[200]

As earlier parts of this article have documented, the regulatory failures in the Reagan and Bush 41 administrations with regard to the savings and loan crisis, the regulatory failures in the Clinton administration with respect to derivatives, and the wholesale failures in the Bush 43 administration among all the banking regulators and the Securities and Exchange Commission, have had a devastating impact upon our economy. This should not be a liberal versus

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> The need to restrict proprietary trading is not only, or perhaps most importantly, a matter of the immediate market risks involved. It is the seemingly inevitable implication for the culture of the commercial banking institutions involved, manifested in the huge incentives to take risk inherent in the compensation practices for the traders. Can one group of employees be so richly rewarded, the traders, for essentially speculative, impersonal, short-term trading activities while professional commercial bankers providing essential commercial banking services to customers, and properly imbued with fiduciary values, be confined to a much more modest structure of compensation? *Id.*

[198] *Board of Governors of the Federal Reserve System*, FED. RESERVE BANK OF N.Y. (Nov. 2008), *available at* http://www.newyorkfed.org/aboutthefed/fedpoint/fed46.html.

[199] David A. Moss, *An Ounce of Prevention*, HARVARD MAGAZINE (Sept. 2009) 25-26 fig.1, *available at* http://harvardmag.com/pdf/2009/09-pdfs/0909-24.pdf.

[200] *Id.*

conservative, or Republican versus Democratic, issue. In fact, two of the wisest regulators were conservative Republican women, Brooksley Born, who saw the danger in derivatives,[201] and Sheila Bair, who viewed the implicit government guarantee provided to the "too big to fail" banks, and the subsidy it provides, as unfair to the rest of the banking system and a threat to financial security.[202] It may be that sex is a better test of good judgment than party affiliation.

Joe Nocera, the highly respected financial journalist, in reviewing Sheila Bair's efforts to get other regulators to take the subprime mortgage practices seriously and to cajole the banks to modify the adjustable rate mortgages that were resetting at levels that homeowners could not afford, concluded:

> My own view is the country would have been far better served if more people in positions of power had been willing to listen to her as the financial crisis unfolded. Hers was a voice of common sense, trying to protect the taxpayer, the bank depositor and the homeowner. If other regulators had taken her early subprime concerns seriously—to cite just one example—the financial world might be a different place today.[203]

Ms. Bair was labeled as "difficult." [204] This is because she viewed her role as protecting depositors and taxpayers, rather than bankers and bondholders. This is a function given to the FDIC by Congress. Policy should be fact-driven, not ideology-driven. It should be clear that persons aligned with an industry, or whose basic premise is that government is not the solution but rather the problem, cannot be expected to put the public interest first as regulators.

A very serious problem is that our financial regulators come from the financial industry, and often go back to it. Thus they have a structural bias and are imbued with the values of the milieu out of which they come. Former Treasury Secretary Paulson, who proposed the bank bailout and sought to extract no conditions in return, was previously the CEO of Goldman Sachs. Larry Summers, the economic advisor to president Obama, worked under Robert Rubin in the Clinton administration, and Rubin became the CEO of Citigroup. These people tend to think alike. The problem of the movement between industry and government has been extensively documented.[205]

Every "good" has its costs. There is no free lunch. If financial institutions want government insurance or government guarantees, then the price is regulation. As Prof. Robert Reich has asserted in tracing the decline of the middle class in America:

> Most telling of all, Washington deregulated Wall Street while insuring it against major losses. In so doing, it allowed finance — which until then had been the servant of American industry — to become its master, demanding short-term profits over long-term growth and raking in an ever larger portion of the nation's profits. By 2007, financial

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[201] *See* Michael David Cobb Bowen, *Brooskley Born & the Regulatory Limit of Democrats*, COBB (Nov. 11, 2008), *available at* http://cobb.typepad.com/cobb/2008/11/brooksley-born.html. *See also* Peter S. Goodman, *Taking Hard New Look at a Greenspan Legacy*, N.Y. TIMES (Oct. 8, 2008), *available at* http://www.nytimes.com/2008/10/09/business/economy/09greenspan.html.
[202] Joe Nocera, *Sheila Bair's Bank Shot,* N.Y. TIMES (July 9, 2011), *available at* http://www.nytimes.com/2011/07/10/magazine/sheila-bairs-exit-interview.html.
[203] *Id*.
[204] *Id*.
[205] 13 BANKERS, supra note 14,at 93-97.

> companies accounted for over 40 percent of American corporate profits and almost as great a percentage of pay, up from 10 percent during the Great Prosperity.[206]

Unless we implement effective regulation, we are doomed to repeat the failures of the 2000s where profit was privatized and risk was socialized. We are also going to be stuck with a no-growth economy in which resources flow from the economy into the banks instead of from the banks into the economy.

VI. Conclusion

After the Great Depression, from the passage of Glass-Steagall in 1933 until the 1980s, there were relatively few bank failures. The safety and solvency of financial institutions was taken for granted. From the end of WWII until the 1970s was also a period of unmatched general prosperity. The 1970s represented a somewhat discordant note, as the economy slowed and inflation ensued, in part driven by the Arab oil embargo.

In 1980, a new ethic arose: government is not the solution, government is the problem. This ushered in almost three decades of deregulation. Very quickly came the Savings and Loan crisis, in-part driven by the problem of having assets long and liabilities short, but also exacerbated by deregulation. Also, at this time, anti-trust enforcement fell out of vogue, and a wave of bank mergers began in the 1990s. This resulted in the six big banks today that are "too big to fail." The deregulatory mindset of the Clinton administration ignored the lethal potential of derivatives, and the libertarian instincts of the Federal Reserve Chairman Alan Greenspan and the Bush 43 administration were blind to the dangers of financial innovation.

The big banks financed the origination of subprime and other toxic mortgages that Chairman Greenspan extolled as financial innovation. The banks then securitized these toxic mortgages and induced the credit rating agencies to give them AAA ratings. Mortgage underwriting standards were non-existent and liars' loans became a norm. Securities due diligence fell by the wayside and, when the toxic mortgages began to default, the economy of the United States imploded. Today we are still witnessing the impact of these "instruments of mass destruction."[207]

We are in the throes of the worst economy since the Great Depression. Like the Great Depression and unlike recessions after it, the plunge in the current economy was caused not by business cyclicality, but by the failure of the banking system. And, it is the failure of the banking system to modify mortgages that are under water, rather than foreclosing on them (sometimes with dubious documentation), that has lengthened the downturn and continues to depress the housing market. The function of the banking system is to intermediate capital, and channel it into productive investments. To the contrary, it has been a consumer of capital and has misallocated capital and created a real estate bubble that collapsed. While most bailout

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[206] *See* Reich, *supra* note 28.

[207] Warren Buffett has characterized derivatives as "instruments of mass destruction. *Quoted in* Paul B. Farrell, *Derivatives the New 'Ticking Bomb,'* WALL ST. J (Mar. 10, 2008), *available at* http://www.marketwatch.com/story/derivatives-are-the-new-ticking-time-bomb. I have taken the liberty of expanding his concern to include other financial innovations, such as subprime loans and pic-a-pay loans.

money has been repaid, the banks have not been held to account for the devastating losses they have inflicted on the economy as a whole and, in particular, on average citizens who have lost their homes and their jobs.

All the blame cannot be placed on the banking sector. Regulation, or rather lack of it, has been driven by an ideology that markets are always self-correcting and that acting in your own perceived best interest will always be good for the economy as a whole. This philosophy has created tremendous wealth for the few and left the many economically regressing. The deregulatory mindset at the Fed had disastrous consequences for the economy and the average American. But the timidity and deference to the banking industry of all the banking regulators, with the exception of two women, has been less than exemplary.

What has the past taught and what does the future offer? Apparently, many have learned little from the past as Dodd-Frank is attacked as excessive regulation when, in reality, it did not go far enough. Supposedly the era of "too big to fail" is over; however, this is not a view held by, for example, Standard & Poor's which has indicated its concern that future bailouts may be in the offing. Nor did Dodd-Frank adequately deal with the misaligned incentives that motivated bank management to take catastrophic risks. Both Standard & Poor's and Chairman Greenspan have opined that if they are too big to fail, then they are too big. Whether the political will exists to break up the banks is questionable, but their depressed stock prices and the Volker rule may provide an impetus for the market to demand such action. Irrespective of whether that happens, the mentality that "government is not the solution, government is the problem" must change.

APPENDIX I

J.P. Morgan

- In 1991, Chemical Bank merged with Manufacturer's Hanover.[208]
- In 1995, First Chicago merged with National Bank of Detroit.[209]
- In 1996, Chemical Bank (assets valued at 1.98% of GDP)[210] merged with Chase Manhattan (assets valued at 1.35% of GDP).[211]
- In 1998, Bank One merged with First Chicago (assets valued at 0.70% of GDP).[212]
- In 2000, J.P. Morgan (assets valued at 0.70% of GDP)[213] purchased Chase Manhattan (assets valued at 1.00% of GDP).[214]
- In 2004, J.P. Morgan Chase (assets valued at 5.64% of GDP)[215] merged with Bank One (assets valued at 2.30% of GDP).[216]
- In 2008, J.P. Morgan (assets valued at 9.40% of GDP)[217] acquires Bear Sterns[218] and Washington Mutual.[219]

Citibank

- In 1988, Commercial Credit bought Primerica (which owned Smith Barney).[220] These companies kept the name Primerca.

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[208] Michael Quint, *The Bank Merger; Big Bank Merger to Join Chemical, Manufacturers*, N.Y. TIMES (July 19, 1991), *available at* http://www.nytimes.com/1991/07/16/business/the-bank-merger-big-bank-merger-to-join-chemical-manufacturers.html (FDIC asset details unavailable before 1992).
[209] Stephanie Strom, *First Chicago and NBD to Merge as Banks Scurry to Grow*, N.Y. TIMES (July 13, 1995), *available at* http://www.nytimes.com/1995/07/13/business/first-chicago-and-nbd-to-merge-as-banks-scurry-to-grow.html.
[210] Percentage of GDP calculated from Bank's total assets divided by National DGP. Bank's total assets retrieved from http://www2.fdic.gov/idasp/main.asp by performing Database search for the bank in question and running a report for the relevant year. National GDP information retrieved from "Current-Dollar and 'Real' GDP" chart found at http://www.bea.gov/national/.
[211] Saul Hansell, *Banking's New Giant: The Deal; Chase and Chemical Agree to Merge in $10 Billion Deal Creating Largest U.S. Bank*, N.Y. TIMES (August 29, 1995), *available at* http://www.nytimes.com/1995/08/29/us/banking-s-new-giant-deal-chase-chemical-agree-merge-10-billion-deal-creating.html (for GDP source and calculation, *see* note 170).
[212] *Banc One-First Chicago Merger Clears Hurdle*, L.A. TIMES (Sept. 9, 1998), *available at* http://articles.latimes.com/1998/sep/09/business/fi-20845 (for GDP source and calculation, *see* note 170).
[213] For GDP source and calculation, *see* note 170.
[214] Chris Isidore, *Chase Buying J.P. Morgan: Stock Deal Valued by Firms at $33B Joins Two of Banking's Biggest Names*, CNN (Sept. 13, 2000), *available at* http://money.cnn.com/2000/09/13/deals/chase_morgan/ (for GDP source and calculation, *see* note 170).
[215] For GDP source and calculation, *see* note 170.
[216] Andrew Ross Sorkin and Landon Thomas Jr., *J.P. Morgan Chase to Acquire Banc One in $58 Billion Deal*, N.Y. TIMES (Jan. 14, 2004), *available at* http://www.nytimes.com/2004/01/14/business/14CND-BANK.html.
[217] For GDP source and calculation, *see* note 170.
[218] Press Release, JPMorgan Chase, JPMorgan Chase to Acquire Bear Stearns (Mar. 16, 2008), *available at* http://investor.shareholder.com/jpmorganchase/releasedetail.cfm?releaseid=299805.
[219] Press Release, Fed. Deposit Ins. Corp., JPMorgan Chase Acquires Banking Operations of Washington Mutual (Sept. 25, 2008), *available at* http://www.fdic.gov/news/news/press/2008/pr08085.html

- In 1993, Primerica added Travelers Insurance and took the name Travelers, Inc.[221]
- In 1997, Travelers Inc. bought Saloman Brothers[222]
- In 1998, Citicorp merges with Travelers, Inc. to form Citigroup Inc. for assets of Citibank valued at 3.22% of GDP[223]
- In 2006, Citibank (assets valued at 5.60% of GDP) consolidated its branches in the West (assets valued at 1.04% of GDP).[224]

Goldman Sachs

- No mergers found after 1990

Bank of America

- In 1992, BankAmerica acquired Security Pacific Corporation.[225] Along with other regional banks.
- In 1994, BankAmerica acquired the Continental Illinois National Bank and Trust Co. of Chicago.[226]
- In 1997, BankAmerica (assets valued at 1.64% of GDP)[227] was acquired by NationsBank with the new entity retaining the name Bank of America Corporation.[228]
- In 2004, Bank of America Corporation (assets valued at 6.51% of GDP)[229] purchased FleetBoston Financial (assets valued at .33% of GDP).[230]
- In 2006, Bank of America Corporation (assets valued at 8.57% of GDP)[231] purchased MBNA (assets valued at 0.06% of GDP).[232]

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[220] Robert J. Cole, *2 Leading Financiers Will Merge Companies in $1.65 Billion Deal*, N.Y. TIMES (Aug. 30, 1988), *available at* http://www.nytimes.com/1988/08/30/business/2-leading-financiers-will-merge-companies-in-1.65-billion-deal.html.
[221] Michael Quint, *Travelers Approves Merger Offer by Primerica*, N.Y. TIMES (Sept. 24, 1993), *available at* http://www.nytimes.com/1993/09/24/business/travelers-approves-merger-offer-by-primerica.html.
[222] *Salomon Succumbs at Last*, THE ECONOMIST (Sept. 25, 1997), *available at* http://www.economist.com/node/101006.
[223] *Travelers, Citicorp to Unite*, CNN (Apr. 6, 1998), *available at* http://money.cnn.com/1998/04/06/deals/travelers/ (for GDP source and calculation, *see* note 170).
[224] For GDP source and calculation, *see* note 170.
[225] Andrew Pollack, *The Bank Merger; BankAmerica in $4 Billion Deal to Acquire Rival Security Pacific*, N.Y. TIMES (Aug. 31, 1991), *available at* http://www.nytimes.com/1991/08/13/business/the-bank-merger-bankamerica-in-4-billion-deal-to-acquire-rival-security-pacific.html.
[226] Saul Hansell, *2 Banks Set $1.9 Billion Merger*, N.Y. TIMES (Jan. 29, 1994), *available at* http://www.nytimes.com/1994/01/29/business/2-banks-set-1.9-billion-merger.html?src=pm.
[227] For GDP source and calculation, *see* note 170.
[228] Mitchell Martin, *Nations Bank Drives $62 Billion Merger: A New BankAmerica: Biggest of U.S. Banks*, N.Y. TIMES (Apr. 14, 1998), *available at* http://www.nytimes.com/1998/04/14/news/14iht-banks.t_0.html (for GDP source and calculation, *see* note 170).
[229] For GDP source and calculation, *see* note 170.
[230] Riva D. Atlas, *Banking Giants, The Overview; Bank of America and Fleetboston Agree to Merger*, N.Y. TIMES (Oct. 28, 2003), *available at* http://www.nytimes.com/2003/10/28/business/banking-giants-the-overview-bank-of-america-and-fleetboston-agree-to-merger.html (for GDP source and calculation, *see* note 170).
[231] For GDP source and calculation, *see* note 170.
[232] Krysten Crawford, *Bank of America Inks $35B Card Deal*, CNNMONEY (June 30, 2005), *available at* http://money.cnn.com/2005/06/30/news/fortune500/boa/ (for GDP source and calculation, *see* note 170).

- In 2006, Bank of America Corporation (assets valued at 9.36% of GDP)[233] purchased The United States Trust Company from Charles Schwab Corporation (assets valued at 0.09% of GDP)[234] and LaSalle Bank Corporation from ABN Amro (assets valued at .78% of GDP). [235]
- In 2008, Bank of America Corporation (Asset value 10.55% of GDP)[236] acquired Countrywide Financial (Corporation (Asset value 0.08% of GDP)[237] and Merrill Lynch and Co (asset value of 0.72% of GDP).[238]

Morgan Stanley

- In 1991, Morgan Stanley acquired Quilter & Co., but sold it in 2006.
- In 1996, Morgan Stanley acquired Van Kampen American Capital.[239]
- In 2004, Morgan Stanley acquired Canary Wharf Group.
- In 2009, Morgan Stanley acquired Smith Barney from Citigroup and is now operating under the name Morgan Stanley Smith Barney.[240]

Wells Fargo

- In 1996, Wells Fargo (asset value of 0.66% of GDP)[241] merged with First Interstate Banccorp (asset value of 0.60% of GPD).[242]
- In 1998, Wells Fargo merged with Norwest and assumed the name Wells Fargo & Company.[243]
- In 1999, Wells Fargo purchased 13 companies with assets of $2.4 billion.

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[233] For GDP source and calculation, *see* note 170.
[234] Josh Lipton, *Bank of America to Buy U.S. Trust*, FORBES (Nov. 20, 2006), *available at* http://www.forbes.com/2006/11/20/bank-of-america-markets-equity-cx_jl_1120markets12.html (for GDP source and calculation, *see* note 170).
[235] *Bank of America Adds LaSalle to Take Lead in Chicago*, USATODAY (Apr. 23, 2007), *available at* http://www.usatoday.com/money/industries/banking/2007-04-23-bank-of-america-buts-lasalle_N.htm (for GDP source and calculation, *see* note 170).
[236] For GDP source and calculation, *see* note 170.
[237] *Bank of America to Acquire Countrywide*, MSNBC.COM (Jan. 11, 2008), *available at* http://www.msnbc.msn.com/id/22606833/ns/business-real_estate/t/bank-america-acquire-countrywide/ (for GDP source and calculation, *see* note 170).
[238] Binyamin Appelbaum and Zachary A. Goldfarb, *Weekend Merger Struck with Bank of America*, WASH. POST (Sept. 15, 2008), *available at* http://www.washingtonpost.com/wp-dyn/content/article/2008/09/14/AR2008091401468.html (for GDP source and calculation, *see* note 170).
[239] *Van Kampen Nearing Sale to Morgan Stanley*, CHI. TRI. (June 22, 1996), *available at* http://articles.chicagotribune.com/1996-06-22/business/9606220203_1_morgan-stanley-group-van-kampen-american-capital-mutual-fund-assets.
[240] Press Release, Morgan Stanley, Morgan Stanley and Citi to Form Industry-Leading Wealth Management Business Through Joint Venture (Jan. 13, 2009), *available at* http://www.morganstanley.com/about/press/articles/af3e409a-e1b7-11dd-84e6-b390c77322d3.html.
[241] For GDP source and calculation, *see* note 170.
[242] Saul Hansell, *Wells Fargo Wins Battle for First Interstate*, N.Y. TIMES (Jan. 25, 1996), *available at* http://www.nytimes.com/1996/01/25/business/wells-fargo-wins-battle-for-first-interstate.html (for GDP source and calculation, *see* note 170).
[243] Press Release, U.S. Dep't of Justice, Justice Department Approves Norwest/Wells Fargo Merger After Parties Agree to $1.18 Billion Divestiture (Oct. 13, 1998), *available at* http://www.justice.gov/atr/public/press_releases/1998/1984.htm.

- In 2000, bought Michigan Financial Corporation, National Bancorp of Alaska, Inc., First Commerce Bancshares, Inc., Ragen MacKenzie Group, Inc., and First Security Corporation.
- In 2008, Wells Fargo (asset value of 4.37% of GDP)[244] purchased Wachovia Corporation (asset value of 3.66% of GDP).[245]

[244] For GDP source and calculation, *see* note 170.
[245] Edward Iwata, *Bank Strife Likely to Spark Mergers, Asset Sales*, USA TODAY (Oct. 13, 2008), *available at* http://www.usatoday.com/money/industries/banking/2008-10-12-banks-mergers_N.htm (for GDP source and calculation, *see* note 170).